WTCI-182-P

W98-7134 - MAYOR'S EMERGENCY MANAGEMENT OFFICE

Quality Assurance Division
Design Standards

TAA No. W98-7134 Charge Code: W2 — 987.134

Tenant:

REVIEW STATUS

Submission No. & Date	Response To	Coordinator's Initial	Memo Date	Approval Date	Facility Rider	Outstanding Comments	Remarks/Status	DWG/SPEC Location
0(03.03.98)		OMC	03.09.98			5		XIX-C/1
1) 4/14/98		HV	4/28/98	—	A	50	WITH HELD	Self - S1 SPECT. 6A
2) 5/13/98		HV	5/19/98	5/19/98	B	22		Self - S1 SPECT. 6A
3) 9/25/98		MLP	10/16/98	—	-	7	APPROVED PENDING	S-1 SPEC 6A
4) 11/05/98	-	MLP	11/25/98	-	-	4	APPROVED PENDING	
5) 12/11/98	-	MLP	12/17/98	-		1	APPROVED PENDING	
6) 02.01.99		OMC	02.22.99			3		S-1
Telephone conversation with J. Mejia 29 Mar 99								
See sketches: FSK-50, SK-58								
7(04.14.99)	6	OMC	04.20.99			1		S-1
8(5-13-99)	7	VT	5-21-99				Approved	
9(07.07.99)		OMC	07.27.99			3		S-1
10(08.25.99)	9	OMC	09.09.99			0		— ditto —

THE PORT AUTHORITY OF NY & NJ

ONE WORLD TRADE CENTER
NEW YORK, NY 10048

(212) 435-7000
(973) 961-6600

September 14, 1999

Swanke Hayden Connell Architects
295 Lafayette Street
New York, N.Y. 10012

Subject: 7 World Trade Center – 23rd Floor
Mayor's Office Of Emergency Management
TAA 987134
Submission #10 - Approval

Dear Mr. Joseph Aliotta:

This letter responds to your submittal dated August 25, 1999, forwarding for review the documents listed in Attachment A to this letter. Tenant Alteration Application # 987134, which was conditionally approved on July 28, 1999, has now been approved. There are no further comments.

Any changes to the already approved scope of work must be submitted to The Port Authority of N.Y. & N.J. for review and approval prior to the commencement of associated work. Only contract documents reviewed and approved by this office are to be released in the field for construction.

At the completion of construction, please submit a set of signed and sealed mylar reproducibles with a complete CADD set of diskettes formatted for AutoCad 14. Each reproducible shall be marked As-Built.

All correspondence or inquiries should be directed to Jeffrey Gertler, Project Manager, The Port Authority of N.Y. & N.J., One World Trade Center, 88 South, New York, N.Y. 10048, (212) 435-4531.

Sincerely,

Joseph Napolitano
Program Manger, Design Build
Supervisor, Tenant Alteration Applications
Tenant Project Management
The World Trade Department

cc: Walter Weems, Silverstein Properties

THE PORT AUTHORITY OF NY & NJ
QUALITY ASSURANCE DIV.
ENGINEERING DEPT.
20 1999
RECEIVED
By
NY98-7134

cc: S. Bhol, J. Castaldo, E. Moscovitz, A. Fadavi, J. Gertler, T. Koebel, R. Lynch, L. Menno, E. Monteverde, S. Murray, J. Napolitano, J. Ruiz, Central File, Chrono File

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #10

The following is a revised list of drawings recommended for approval. Changes from the previous list are shown in boldface:

Drawing		
T-1	revised	09/25/98
A-EG-23	revised	09/25/98
A-1-1	**revised**	**08/23/99**
A-7-1	revised	07/24/98
A-23-1	revised	09/25/98
A-23-2	revised	07/24/98
A-23-3	revised	09/25/98
A-23-4	revised	09/25/98
A-23-5	revised	05/04/98
A-23-6	revised	05/04/98
A-48-	revised	05/04/98
D-0	revised	09/25/98
D-1	revised	09/25/98
D-2	revised	07/24/98
D-3	revised	05/04/98
D-4	revised	09/25/98
D-5	revised	05/04/98
D-6	revised	07/24/98
D-7	revised	07/24/98
D-8	revised	05/04/98
D-9	revised	07/24/98
D-10	revised	09/25/98
D-11	revised	07/24/98
D-12	revised	05/04/98
D-13	revised	09/25/98
Workstation Plan	revised	05/04/98
Panel/Energy Plan	revised	05/04/98
M1.01	revised	06/22/99
M1.07	revised	09/25/98
M1.23	revised	09/25/98
M4.01	revised	09/25/98
E0.01	revised	05/15/98
E1.01	revised	09/25/98

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #10

E1	revised	07/24/98
E1.48	revised	05/04/98
E6.01	revised	05/04/98
E6.02	revised	05/04/98
E2.23	revised	09/25/98
E3.01	revised	09/25/98
E4.01	revised	09/25/98
E4.02	revised	09/25/98
E4.03	revised	09/25/98
P1.01	revised	05/13/98
P2.07	revised	05/13/98
P3.23	revised	09/25/98
P4.23	revised	09/25/98
P5.23	revised	05/13/98
FP1.01	revised	09/25/98
FP2.07	revised	05/13/98
FP3.23	revised	05/15/98
FP4.23	revised	09/25/98
FP5.23	revised	05/15/98
FP6.23	revised	05/13/98
TC-101	revised	05/13/98
S-1	revised	12/07/98
S-2	revised	12/07/98
S-3	revised	09/25/98
S-4	revised	12/07/98
S-5	revised	12/07/98
038Z001	revised	07/24/99
98038L002	revised	07/24/98
038L003	revised	07/24/98
038L005	revised	05/15/98
H-5	dated	03/08/98
AV-1	revised	05/04/98
AV-2	revised	05/04/98
AV-3	revised	05/04/98
AV-4	revised	05/04/98
AV-E0	revised	05/04/98

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #10

AV-E1	revised	07/24/98
AV-E2	revised	05/04/98
AV-E3	revised	05/04/98
AV-E4	revised	05/04/98
AV-E5	revised	05/04/98
AV-S1	revised	05/04/98
AV-S2	revised	05/04/98
AV-S3	revised	05/04/98
AV-S4	revised	05/04/98
AV-S5	revised	05/04/98
AV-S6	revised	07/24/98
AV-S7	revised	07/24/98
AV-S8	revised	05/04/98
TC-100	revised	05/04/98
TC-101	revised	09/25/98
TC-103	revised	05/04/98
TC-103A	revised	05/04/98
TC-103B	revised	05/04/98
FSK-26	revised	11/09/98
FSK-27	revised	11/09/98
FSK-41	dated	11/04/98
FSK-42	dated	11/06/98
FSK-50	dated	11/24/98
S-7-1	dated	09/28/98
S-7-2	dated	09/28/98
S-S.1	dated	10/15/98
S-FS-7	dated	10/15/98
SKS-S-2	dated	10/26/98
22A.1	dated	10/28/98
66	dated	10/28/98
67	dated	10/20/98
S-R.A	dated	10/20/98
Vikonics, Sheet 1 of 1	**dated**	**10/14/98**

10

THE PORT AUTHORITY OF NY & NJ

Memorandum

To: Ms. Teresa Koebel, Manager, World Trade Project Management
From: C. John Lin, P.E.
Date: September 9, 1999
Subject: **WTC - ALTERATION APPLICATION W-987134 - MAYOR'S OFFICE OF EMERGENCY MANAGEMENT - 7 WTC, 1ST, 7TH, 23RD FLOORS AND ROOF**
Reference: Review Request dated 8/25/99.

Copy To:			
	A. Fadavi	R. Rafferty	Job Folder
	J. Napolitano	J. Richardson	Chrono Folder

A review of the material listed below and submitted with the referenced request has been made.

The previous recommendation that approval to proceed with construction be given subject to..., has been changed to recommending that **approval** to proceed with construction be granted.

There are no comments

Drawings:

REMARKS: 1) Please see attachment for the revised list of drawings recommended for approval.
2) This memorandum was transmitted to the Facility via Outlook on September 9, 1999.

C. John Lin, P.E.
Manager
Quality Assurance Division

I.D.: W98-7134-010
OMC/lm
att.

Reviewers:
O.M. Clemente, Coordinator and Mechanical; M. Palmieri, Architectural; A. Rohssler, Electrical; W. Lipsky, Structural.

ATTACHMENT

ALTERATION APPLICATION W-987134

The following is a revised list of drawings recommended for approval. Changes from the previous list are shown in boldface:

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AV-E4	revised	05/04/98
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AV-S1	revised	05/04/98
AV-S2	revised	05/04/98
AV-S3	revised	05/04/98
AV-S4	revised	05/04/98
AV-S5	revised	05/04/98
AV-S6	revised	07/24/98
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66	dated	10/28/98
67	dated	10/20/98
S-R.A	dated	10/20/98
Vikonics, Sheet 1 of 1	dated	10/14/98

090999

(9/15)

THE POR[illegible]UTHORITY OF NEW YORK AND NEW [illegible]RSERY
REVIEW REQUEST

DISTRIBUTION		
No	To	Facility
•	QAD	51 N
	~~D. Warren~~	~~PATC ZIP40~~
•		

7 WTC FLR_____ TAA # 987134 Date 8/25/99

Application MAYOR'S OFFICE

Consultant SWANKE HAYDEN

Estimated Cost_____ Submittal No. 10

Description of Work
REPLY TO COMMENTS ON
RELOCATION OF FUEL LINE

Please review the attached (revised) application and send comments to:

Name: Jeffrey Gertler

Location: 1 WTC - 88 - South Phone: 435-4531

9/9/99
DUE DATE

OFFICE COPY

DESIGN DISCIPLINES

- Architectural
- Egress Analysis
- Structural
- HVAC
- Plumbing
- Sprinkler
- Electrical
- Utility > 600 V
- Civil
- Geotechnical
- Environmental
- Fueling
- Radio Freq. Coord.
- Corrosion Protection
- Elevator / Escalator
- Other_____

ATTACHMENTS

- ☐ Document List
- ☐ Contract Drawings
- ☐ Contract Specifications
- ☐ Tenant Response
- ☐ Computations
- ☐ Reports
- ☐ Catalog Cuts
- ☐ Other

DESCRIPTION

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV.
DESIGN STANDARDS
AUG 26 1999
W98-7134 (10)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

Special Instructions

BY AGREEMENT WITH THE PORT AUTHORITY DESIGN WORK SHALL ONLY MEET NEW YORK CITY CODE AND DOES NOT HAVE TO INCORPORATE WTC DESIGN GUIDELINES

Copy To: T. Koebel, J. Napolitano, R. Lynch, E. Monteverde

• Jeffrey Gertler

Jeffrey Gertler
Signature

SWANKE HAYDEN CONNELL ARCHITECTS

Memorandum

OFFICE COPY

TO: Jeffrey Gertler, PA

FROM: Joseph Aliotta

SUBJECT: Mayor's Office of Emergency Management (MOEM)
"Emergency Operations Center – 7 World Trade Center"
Responses to PA Attachment List of Comments – Submission #9 Conditional Approval

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPARTMENT
DESIGN STANDARDS
AUG 26 1999
W98-7134 (10)
RECEIVED
ALTERATIONS AGR.
TENANT CONSTRUCTION

SHCA Project No: 5576A

PA TAA # 987134

DATE: August 23, 1999

In response to Port Authority comments submission #9 dated July 28, 1999 the following is the requested written response:

STRUCTURAL

1. Drawing A-1-1, Conduit Hanging Details 10:
   a) Indicate diameter and enbedment of anchor bolts and verify their adequacy.

   Response: See attached calculations.

   b) Verify with calculation that the existing steel beams are not overstressed under loads from the steel conduit

   Response: See attached calculations

MECHANICAL

2. Drawing A-1-1. The NYC Building Code, Section 27-830(f)(2) requires that horizontal offsets for oil piping shall be enclosed in at least ten gauge steel pipe and further enclosed in a two hour rated construction. The revised Design of spray-on fire proofing of the pipe is not the same, as the rated enclosure required by the code. Revise the design to comply with the code requirement.

   Response: Will comply see-attached drawings

ELECTRICAL

2. Doors 40A and 40B. No response has been received to Rider Comment 1, Submission 5. The concept of a direct Release of the magnetic locks by the fire alarm system, mentioned by Swanke Hayden Connell Architects in Submission 5, is acceptable. However, it is contradicted by the Vikonics drawings that has been submitted to date, which show an access control system interposed between the door locks and the fire alarm system. The Vikonics access control system does not have approval for the use in the City of New York. Revise the Signed and sealed contract documents to clearly show that the fire alarm system connections are only to New York City approved apparatus to which the fire alarm system will be connected.

   Response: Will comply see-attached drawing. Please note that diagram indicates Typ. Door 40A and 40B are a stand-alone system and are not connected to the secyriry system. Refer to previously approved electrical drawing E1.23 that indicates pull station at the reception area.

Swanke Hayden Connell Ltd./Swanke Hayden Connell & Partners LLP
295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059

THE CANTOR SEINUK GROUP P.C.
600 MADISON AVENUE • NEW YORK, NEW YORK 10022 • TEL (212) 755-4242 • FAX (212) 752-6924

OEM

SEVEN WORLD TRADE CENTER
NEW YORK, NY

OFFICE COPY

TENANT ALTERATIONS

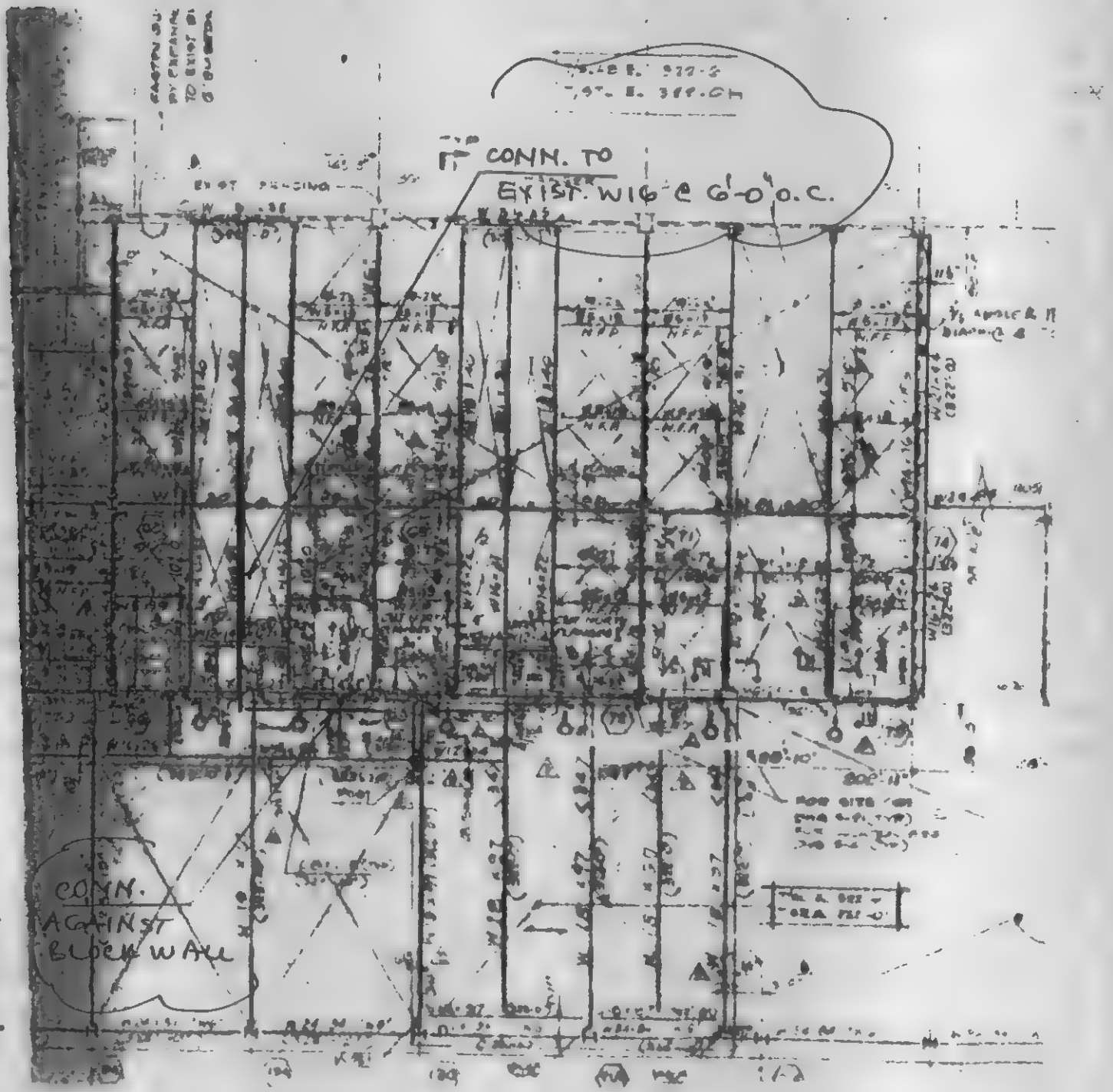
THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY & DESIGN STANDARDS
AUG 26 1999
W98-7134 (10)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION

STRUCTURAL CALCULATIONS
AUGUST 1999

PROF. YSRAEL A. SEINUK, P.E., CEng, FACI, FICE, FASCE, *Chief Executive Officer* • SILVIAN MARCUS, P.E., *President*
ESTANISLAO SALCEDO, P.E., *Senior Vice President* • AHMAD RAHIMIAN, P.E., Ph.D., *Vice President*
JEFFREY SMILOW, P.E., *Vice President* • KAMRAN MOAZAMI, P.E., *Vice President*

THE CANTOR SEI[illegible] GROUP, P.C.
CONSULTING ENGINEERS
600 Madison Avenue
New York, N.Y. 10022
(212) 755-4242 FAX (212) 752-6924

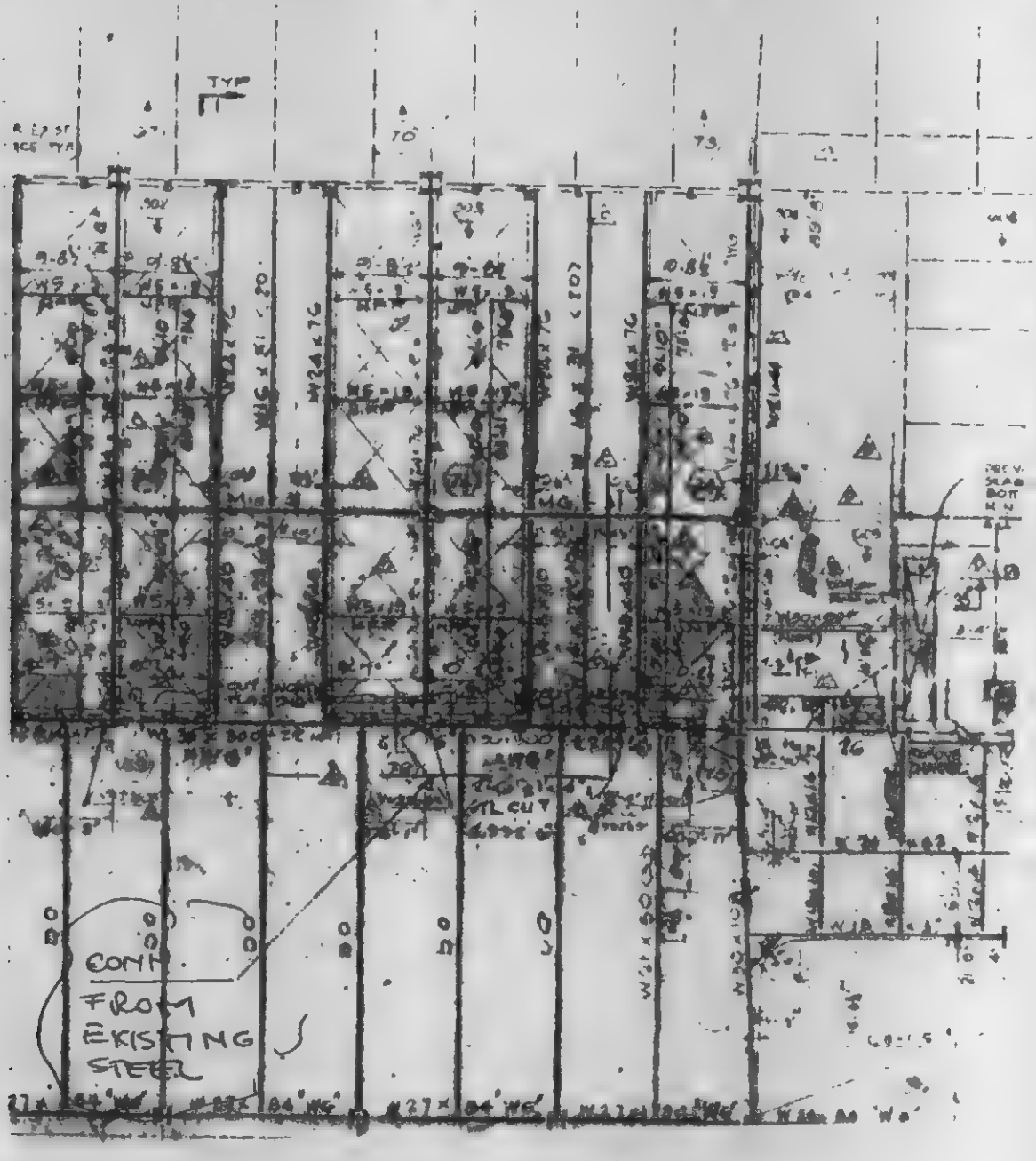
JOB OEM
SHEET NO. 8C OF
CALCULATED BY AB DATE 8.4.99
CHECKED BY DATE
SCALE CONDUIT HANGING DETAIL 10



PART PLAN @ 2nd FL.

THE CANTOR SEI. (GROUP, P.C.
CONSULTING ENGINEERS
600 Madison Avenue
New York, N.Y. 10022
(212) 755-4242 FAX (212) 752-6924

JOB O E M
SHEET NO. 8. OF
CALCULATED BY AB DATE 8.4.99
CHECKED BY DATE
SCALE CONDUIT HANGING DETAIL 10



PART PLAN @ 3rd FL

PRODUCT 204-1 (Single Sheets) 205-1 (Padded)

THE CANTOR SEI[illegible] GROUP, P.C.
CONSULTING ENGINEERS
600 Madison Avenue
New York, N.Y. 10022
(212) 755-4242 FAX (212) 752-6924

JOB OEM
SHEET NO. 8 OF
CALCULATED BY AB DATE 8.9.99
CHECKED BY DATE
SCALE CONDUIT HANGING DETAIL 10

SEE ARCH. DWG. A-1-1 DET.S 10 & 6.

Weight of conduit — 8"ϕ pipe w/3 conduits.
Consider all 8"ϕ filled w/ oil — conservative

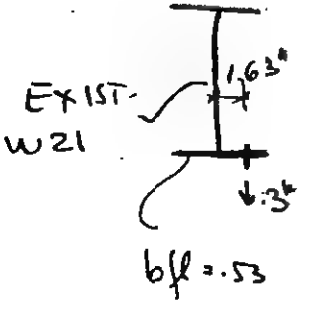
$57 PCF \times \frac{3.14 \times .66^2}{4} = 20 PLF$ SAY 25 PLF.

— CONNECTION TO EXISTING CONCRETE BLOCK WILL BE MADE W/ 1/4"ϕ HILTI HIT C'20 @ 6'-0" O.C. (2" EMBED. MIN.) OR EQ. TENS. = 260#
SHEAR = 420#

$R = \frac{25 PLF \times 6'}{2} = 75 lbs.$

— CONNECTION TO EXISTING STEEL W21×50<30>

$P = \frac{25 PLF \times 18.2'}{2} = 228 lbs = .3^k$ @ EA. BM.



$M = .3^k \times 1.63 = .49^{k\cdot in}$

$S_{req} = \frac{12' \times .53^2}{6} = .56 in^3$

$f_b = \frac{4.9}{.56} = 8.8 KSI$ OK.

PRODUCT 204 I (Graph Sheets) 285-1 (Printed)

THE PORT AUTHORITY OF NY & NJ

ONE WORLD TRADE CENTER
NEW YORK, NY 10048

(212) 435-7000
(201) 961-6600

July 28, 1999

Swanke Hayden Connell Architects
295 Lafayette Street
New York, N.Y. 10012

Subject: 7 World Trade Center – 23rd Floor
Mayor's Office Of Emergency Management
TAA 987134
Submission #9 - Conditional Approval

Dear Mr. Joseph Aliotta:

This letter responds to your submittal dated July 7, 1999, forwarding for review the documents listed in Attachment A to this letter. Tenant Alteration Application # 987134 has been approved subject to compliance with the comments listed in Attachment B to this letter.

Incorporate the requirements of the comments into the construction documents, respond to each comment in writing, and submit six (6) sets of the revised documents by August 11, 1999. The revised documents shall be signed and sealed by the Engineer or Architect of record who is licensed to practice in the State of New York. Indicate the latest revision number on each drawing in the title box, circle each revision and place the latest revision number inside a triangle. Your co-operation in meeting the submission date for comment resolution will assist in meeting your client's schedule for occupancy.

Any changes to the already approved scope of work must be submitted to The Port Authority of N.Y. & N.J. for review and approval prior to the commencement of associated work. Only contract documents reviewed and approved by this office are to be released in the field for construction.

All correspondence or inquiries should be directed to Jeffrey Gertler, Project Manager, The Port Authority of N.Y. & N.J., One World Trade Center, 88 South, New York, N.Y. 10048, (212) 435-4531.

Sincerely,

Joseph Napolitano
Supervisor, Design Build
And Tenant Alteration Applications
The World Trade Department

THE PORT AUTHORITY OF NY & NJ
QUALITY ASSURANCE DIV.
ENGINEERING DEPT

REC.

W98-7134

cc: Walter Weems, Silverstein Properties, 7 World Trade Center, New York, N.Y. 10048

bcc: S. Bhol, J. Castaldo, E. Moscovitz, A. Fadavi, J. Gertler, T. Koebel, R. Lynch, L. Menno, E. Monteverde, S. Murray, J. Napolitano, J. Ruiz, Central File, Chrono File

ATTACHMENT B – LIST OF COMMENTS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #9

QUALITY ASSURANCE DIVISION COMMENTS

STRUCTURAL

1. Drawing A-1-1, Conduit Hanging Detail 10.

   a) Indicate diameter and embedment of anchor bolts and verify their adequacy.

   b) Verify with calculation that the existing steel beams are not overstressed under the added loads from the steel conduit.

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   Revise the design to comply with the Code requirement.

ELECTRICAL

3. Doors 40A and 40B. No response has been received to Rider Comment 1, on Submission 5. The concept of a direct release of the magnetic locks by the fire alarm system, mentioned by Swnake Hayden Connell Architects in Submission 5, is acceptable. However, it is contradicted by the Vikonics drawings that has been submitted to date, which show an access control system interposed between the door locks and the fire alarm system. The Vikonics access control system does not have approval for use in the City of New York. Revise the signed-and-sealed contract documents to clearly show that the fire alarm system connections are only to New York City-approved apparatus, and provide the model and MEA numbers of the apparatus to which the fire alarm system will be connected.

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #9

Subject to compliance with the requirements listed in this letter, the following is a revised list of drawings recommended for approval. Changes from the previous list are shown in boldface:

Drawing		
T-1	revised	09/25/98
A-EG-23	revised	09/25/98
A-1-1	**revised**	**06/17/99**
A-7-1	revised	07/24/98
A-23-1	revised	09/25/98
A-23-2	revised	07/24/98
A-23-3	revised	09/25/98
A-23-4	revised	09/25/98
A-23-5	revised	05/04/98
A-23-6	revised	05/04/98
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D-9	revised	07/24/98
D-10	revised	09/25/98
D-11	revised	07/24/98
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M1.07	revised	09/25/98
M1.23	revised	09/25/98
M4.01	revised	09/25/98
E0.01	revised	05/15/98
E1.01	revised	09/25/98
E1.07	revised	07/24/98

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #9

E1.48	revised	05/04/98
E6.01	revised	05/04/98
E6.02	revised	05/04/98
E2.23	revised	09/25/98
E3.01	revised	09/25/98
E4.01	revised	09/25/98
E4.02	revised	09/25/98
E4.03	revised	09/25/98
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AV-E5	revised	05/04/98

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7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #9

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TC-103B	revised	05/04/98
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FSK-27	revised	11/09/98
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FSK-42	dated	11/06/98
FSK-50	dated	11/24/98
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22A.1	dated	10/28/98
66	dated	10/28/98
67	dated	10/20/98
S-R.A	dated	10/20/98

9

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

M E M O R A N D U M

To: Ms. Teresa Koebel, Manager, World Trade Project Management
From: C. John Lin, P.E.
Date: July 27, 1999
Subject: **WTC - ALTERATION APPLICATION W-987134 - MAYOR'S OFFICE OF EMERGENCY MANAGEMENT - 7 WTC, 1ST, 7TH, 23RD FLOORS AND ROOF**

Reference: Review Request dated 7/07/99.

Copy To: A. Fadavi, J. Napolitano, R. Rafferty, J. Richardson, Job Folder, Chrono Folder

A review of the material submitted with the referenced request has been made.

The previous recommendation of unconditional approval to proceed with construction has been changed to recommending that **approval** to proceed with construction be given **subject** to the submission of the items listed below being revised in accordance with the **three (3) requirements** listed on the attached rider.

Drawings:

REMARKS: 1) Please see attachment for the revised list of drawings recommended for approval.

2) This memorandum was transmitted to the Facility via OA on July 27, 1999.

for C. John Lin, P.E.
Manager
Quality Assurance Division

I.D.: W98-7134-009
OMC/lm
att.

Reviewers:
O.M. Clemente, Coordinator and Mechanical; M. Palmieri, Architectural; A. Rohssler, Electrical; W. Lipsky, Structural, D. Luey, Fire Protection.

RIDER

ALTERATION APPLICATION W-987134

STRUCTURAL

1. Drawing A-1-1, Conduit Hanging Detail 10.

   a) Indicate diameter and embedment of anchor bolts and verify their adequacy.

   b) Verify with calculation that the existing steel beams are not overstressed under the added loads from the steel conduit.

MECHANICAL

2. Drawing A-1-1. The NYC Building code, Section 27-830(f)(2) requires that horizontal offsets for oil piping shall be enclosed in at least ten gage steel pipe and further enclosed in a two-hour rated construction. The revised design of spray on fire proofing of the pipe is not the same as the rated enclosure required by the Code. Revise the design to comply with the Code requirement.

ELECTRICAL

3. Doors 40A and 40B. No response has been received to Rider Comment 1, on Submission 5. The concept of a direct release of the magnetic locks by the fire alarm system, mentioned by Swnake Hayden Connell Architects in Submission 5, is acceptable. However, it is contradicted by the Vikonics drawings that has been submitted to date, which show an access control system interposed between the door locks and the fire alarm system. The Vikonics access control system does not have approval for use in the City of New York. Revise the signed-and-sealed contract documents to clearly show that the fire alarm system connections are only to New York City-approved apparatus, and provide the model and MEA numbers of the apparatus to which the fire alarm system will be connected.

ATTACHMENT

ALTERATION APPLICATION W98-7134

Subject to compliance with the requirements listed in this memorandum's rider, the following is a revised list of drawings recommended for approval. Changes from the previous list are shown in boldface:

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E2.23	revised	09/25/98
E3.01	revised	09/25/98
E4.01	revised	09/25/98

Drawing (cont'd)

E4.02	revised	09/25/98
E4.03	revised	09/25/98
P1.01	revised	05/13/98
P2.07	revised	05/13/98
P3.23	revised	09/25/98
P4.23	revised	09/25/98
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FSK-27	revised	11/09/98
FSK-41	dated	11/04/98

Drawing (cont'd)

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FSK-50	dated	11/24/98
S-7-1	dated	09/28/98
S-7-2	dated	09/28/98
S-S.1	dated	10/15/98
S-FS-7	dated	10/15/98
SKS-S-2	dated	10/26/98
22A.1	dated	10/28/98
66	dated	10/28/98
67	dated	10/20/98
S-R.A	dated	10/20/98

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY
ENGINEERING DEPARTMENT - DESIGN DIVISION TAA REVIEW REQUEST

To: D. LUEY (Reviewer) Location: 7 4 S

From: QAD DESIGN STANDARDS Date: 7/13/99

TAA # W98-7134-009 (Submission #) Facility: 7 WTC

Tenant: MAYOR'S EMERG. OFFICE Rec'd. Date: 7/7/99

Description of Work: EMERG. MNGMNT. OFFICE

Charge Code: W02 987134

Review Disciplines

- ☐ Architectural
- ☐ Structural
- ☐ HVAC
- ☐ Plumbing
- ☑ Fire Protection/ Sprinklers/Etc.
- ☐ Electrical/Metering
- ☐ Utility> 600 V/ 5 KV
- ☐ Civil
- ☐ Geotechnical
- ☐ Environmental/Asbestos Abatem't.
- ☐ Fueling
- ☐ Radio Frequency Coordination
- ☐ Corrosion Protection
- ☐ Elevator/Escalator
- ☐ Traffic
- ☐ Other(specify) _____

Attachments

- ☐ Document List
- ☑ Contract Drawings
- ☐ Contract Specifications
- ☐ Tenant Response
- ☐ Calculations
- ☐ Catalog Cuts
- ☐ Reports
- ☐ Certifications
- ☐ Previous Rider
- ☑ Other (specify) LTR: ALIOTTA/GERTLER

Special Instructions

REVISED FUEL LINE RUN

Reviewer Information

Name Danny Luey
Date started July 14, 1999
Date completed July 15, 1999
Review time(days) ___
New comments 0
Repeat comments 0

DUE DATE: 7/19/99

Please notify the COORDINATOR if you cannot complete the review by the due date.

Please review the attached submittal; FAX and send your written comments to the following COORDINATOR:

Name: O. CLEMENTE Location: 51 N

Phone #: (212) 435-8589 FAX #: (212) 435-2069*

* If responding by fax, please advise coordinator in advance at telephone number indicated.

THE P[illegible] AUTHORITY OF NEW YORK AND NE[illegible]ERSEY
REVIEW REQUEST

7/26

DISTRIBUTION		
No	To	Facility
4	QAD	51 N
1	D. Warren	PATC ZIP43

7 WTC FLR_____ TAA # 987-134 Date 7/7/99

Application MAYOR'S OFFICE

Consultant SWANKE HAYDEN

Estimated Cost_____ Submittal No. 9

Description of Work
RELOCATION OF FUEL LINE

Please review the attached (revised) application and send comments to:

Name: Jeffrey Gertler

Location: 1 WTC - 88 - South Phone: 435-4531

7/21/99
DUE DATE

OFFICE COPY

DESIGN DISCIPLINES

- ☐ Architectural
- ☐ Egress Analysis
- ☐ Structural
- ☐ HVAC
- ☐ Plumbing
- ☐ Sprinkler
- ☐ Electrical
- ☐ Utility > 600 V
- ☐ Civil
- ☐ Geotechnical
- ☐ Environmental
- ☐ Fueling
- ☐ Radio Freq. Coord.
- ☐ Corrosion Protection
- ☐ Elevator / Escalator
- ☐ Other_____

ATTACHMENTS

- ☐ Document List
- ☐ Contract Drawings
- ☐ Contract Specifications
- ☐ Tenant Response
- ☐ Computations
- ☐ Reports
- ☐ Catalog Cuts
- ☐ Other

DESCRIPTION

THE PORT AUTHORITY OF N.Y. & N.J.
~~ENGINEERING DEPT. QUALITY ASSURANCE DIV.~~
DESIGN STANDARDS
JUL - 7 1999
W98-7134 (9)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

Special Instructions

BY AGREEMENT WITH THE PORT AUTHORITY DESIGN WORK SHALL ONLY MEET NEW YORK CITY CODE AND DOES NOT HAVE TO INCORPORATE WTC DESIGN GUIDELINES

Copy To: T. Koebel, J. Napolitano, R. Lynch, E. Monteverde

Jeffrey Gertler

Jeffrey Gertler
Signature

SWANKE HAYDEN CONNELL ARCHITE..S

295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059, E-Mail GENERAL@SHCA.COM

OFFICE COPY

June 24, 1999

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV.
DESIGN STANDARDS
JUL - 7 1999
W98-7134 (9)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

Mr. Jeffrey Gertler
Project Manager
Port Authority of NY & NJ
One World Trade Center, Suite 88 South
New York, New York 10048-0682

Re: Mayor's Office of Emergency Management (MOEM)
7 World Trade Center
TAA No. 987.134 / SHCA Project No. 5576A
"Resubmission of the Ground Floor Fuel Oil Line Routing"

Dear Mr. Gertler:

We respectfully resubmit and request review of the attached revised routing for the proposed fuel oil line to the new MOEM fuel oil tank previously reviewed and approved for the above referenced project. Due to unforeseen and concealed field conditions, the routing approved by the Port Authority in May 1999 is not feasible for construction. Unfortunately, these conditions did not come to light until the actual commencement of the work. The attached drawings indicate a revised route, which avoids the elevator shafts and travels from the existing Fuel Oil Pump Room, through an existing Mechanical Room and Telephone Room previously not considered to the new MOEM fuel oil tank. After careful review with Silverstein Properties, Inc, Ambassador Construction, the engineers and sub-contractors, we believe this route to be feasible and it is in compliance to the NYC Building Code.

We thank you in advance for the Port Authority's time and patience regarding the above. Should the PA have any questions or comments, please contact the undersigned.

Sincerely,

Swanke Hayden Connell & Partners LLP

Joseph J. Aliotta

Joseph J. Aliotta, AIA
Associate Principal

W:\5576A\DOCS\LETTERS\PA GERTLER 99 06 24 99 FUEL OIL LINE SUBMISSION.DOC

THE PORT AUTHORITY OF NY & NJ

ONE WORLD TRADE CENTER
NEW YORK, NY 10048

(212) 435-7000
(973) 961-6600

May 24, 1999

Swanke Hayden Connell Architects
295 Lafayette Street
New York, N.Y. 10012

Subject: 7 WORLD TRADE CENTER – 23rd FLOOR
MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA 987.134
SUBMISSION #8 - APPROVAL

Dear Mr. Joseph Aliotta:

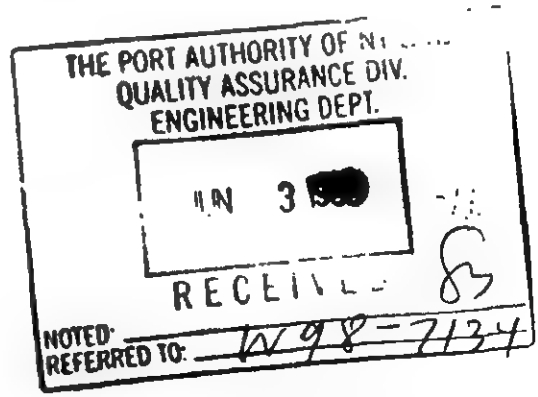
This letter responds to your submittal dated May 13, 1999, forwarding for review the documents listed in Attachment A to this letter. Tenant Alteration Application # 987 134 has been approved. There are no review comments

Any changes to the already approved scope-of-work must be submitted to the Port Authority for review and approval prior to the commencement of associated work. Only contract documents reviewed and approved by this office are to be released in the field for construction.

All correspondence or inquiries should be directed to Jeffrey Gertler, Port Authority, One World Trade Center, 88 South, New York, N.Y. 10048, (212) 435-4531.

Sincerely,

Joseph Napolitano
Supervisor, Design Build
And Tenant Alteration Applications
The World Trade Department



cc: Walter Weems, Silverstein Properties, 7 World Trade Center, New York, N.Y. 10048

bcc: S. Bhol, J. Castaldo, A. Fadavi, J. Gertler, T. Koebel, R. Lynch, L. Menno, E. Monteverde, S. Murray, J. Napolitano, R. Rafferty, J. Ruiz, Central File, Chrono File

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA – 987134
SUBMISSION # 8 - APPROVAL

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ATTACHMENT A – LIST OF DRAWINGS
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TAA – 987134
SUBMISSION # 8 - APPROVAL

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AV-E4	revised	05/04/98
AV-E5	revised	05/04/98
AV-S1	revised	05/04/98

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7 WTC – MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA – 987134
SUBMISSION # 8 - APPROVAL

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AV-S2	revised	05/04/98
AV-S4	revised	05/04/98
AV-S5	revised	05/04/98
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AV-S7	revised	07/24/98
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S-FS-7	dated	10/15/98
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S-R.A	dated	10/20/98

8

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

M E M O R A N D U M

To: Ms. Teresa Koebel, Manager, World Trade Project Management
From: C. John Lin, P.E.
Date: May 24, 1999
Subject: **WTC - ALTERATION APPLICATION W-987134 - MAYOR'S OFFICE OF EMERGENCY MANAGEMENT - 7 WTC, 1ST, 7TH, 23RD FLOORS AND ROOF**

Reference: Review Request dated 5/13/99.

Copy To: A. Fadavi, J. Napolitano, R. Rafferty, J. Richardson, Job Folder, Chrono Folder

A review of the material listed below and submitted with the referenced request has been made.

The previous recommendation that approval to proceed with construction be given subject to..., has been changed to recommending that **approval** to proceed with construction be given.

There are no comments.

Drawings: Calculations:

REMARKS: 1) Attached is a revised list of drawings recommended for approval.

2) This memorandum was transmitted to the Facility via OA on May 24, 1999.

C. John Lin, P.E.
Manager
Quality Assurance Division

I.D.: W98-7134-008
VT/mt
att.

Reviewers:
V. Tsin, Coordinator and Structural.

ATTACHMENT

ALTERATION APPLICATION W98-7134

The following is a revised list of drawings recommended for approval. All changes from the previous list are shown in **boldface:**

Drawing		
T-1	revised	09/25/98
A-EG-23	revised	09/25/98
A-1-1	**revised**	**05/11/99**
A-7-1	revised	07/24/98
A-23-1	revised	09/25/98
A-23-2	revised	07/25/98
A-23-3	revised	09/25/98
A-23-4	revised	09/25/98
A-23-5	revised	05/04/98
A-23-6	revised	05/04/98
A-48-1	revised	05/04/98
D-0	revised	09/25/98
D-1	revised	09/25/98
D-2	revised	07/24/98
D-3	revised	05/04/98
D-4	revised	09/25/98
D-5	revised	05/04/98
D-6	revised	07/24/98
D-7	revised	07/24/98
D-8	revised	05/04/98
D-9	revised	07/24/98
D-10	revised	09/25/98
D-11	revised	07/24/98
D-12	revised	05/04/98
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E3.01	revised	09/25/98
E4.01	revised	09/25/98

Drawing (cont'd)

E4.02	revised	09/25/98
E4.03	revised	09/25/98
P1.01	revised	05/13/98
P2.07	revised	05/13/98
P3.23	revised	09/25/98
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FP2.07	revised	05/13/98
FP3.23	revised	05/15/98
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FP5.23	revised	05/15/98
FP6.23	revised	05/13/98
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S-2	revised	12/07/98
S-3	revised	09/25/98
S-4	revised	12/07/98
S-5	revised	12/07/98
038Z001	revised	07/24/98
038L002	revised	07/24/98
038L003	revised	07/24/98
038L005	revised	05/15/98
H-5	dated	03/08/98
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AV-2	revised	05/04/98
AV-3	revised	05/04/98
AV-4	revised	05/04/98
AV-E0	revised	05/04/98
AV-E1	revised	07/24/98
AV-E2	revised	05/04/98
AV-E3	revised	05/04/98
AV-E4	revised	05/04/98
AV-E5	revised	05/04/98
AV-S1	revised	05/04/98
AV-S3	revised	05/04/98
AV-S2	revised	05/04/98
AV-S4	revised	05/04/98
AV-S5	revised	05/04/98
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TC-103	revised	05/04/98
TC-103A	revised	05/04/98
TC-103B	revised	05/04/98
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FSK-27	revised	11/09/98
FSK-41	dated	11/04/98

Drawing (cont'd)

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FSK-50	dated	11/24/98
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SKP-2	revised	11/03/98
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S-7-2	dated	09/28/98
S-S.1	dated	10/15/98
S-FS-7	dated	10/15/98
SKS-S-2	dated	10/16/98
22A.1	dated	10/28/98
66	dated	10/28/98
67	dated	10/28/98
S-R.A	dated	10/20/98

Revised 2/99

THE POI AUTHORITY OF NEW YORK AN JEW JERSEY
TENANT ALTERATION APPLICATION REVIEW REQUEST

6/3

DISTRIBUTION		
No.	To	Facility
4	QAD	5IN
1	D. Warren	PATC Zip43
~~1~~	~~S.P. Chinn~~	~~88S~~
~~1~~	~~G. Daly~~	~~88 C~~
~~1~~	~~R. Brown~~	~~88 C~~
~~1~~	~~E. DeMartini/Nick Strenk - LERA~~	~~2 WTC 37th Fl~~
~~2~~	~~D. Devlin~~	~~2 WTC~~
~~1~~	~~CADD Disk Set~~	~~37th Fl.~~
~~1~~	~~P. Negron~~	~~2 WTC 37th Fl~~
~~1~~	~~C. Semah~~	~~2 WTC 35th Fl~~

Facility 7WTC Floor 23 TAA No. 987-134 Date 5/13/99

Application/Tenant MAYOR'S OFFICE

Consultant SWANKE HAYDEN

Estimated Cost _____ Submittal No. 8

Description of Work

RESPONSE TO COMMENT

Please review the attached (revised) application and send comments to:

Name: Jeff Gertler

Location: 1 WTC, 88S Phone No. 435-4531
Fax No.: 435-8168

5/21/99
Due Date

DESIGN DISCIPLINES
- [ ] Architectural
- [ ] Egress Analysis
- [ ] Structural
- [ ] HVAC
- [ ] Plumbing
- [ ] Sprinkler
- [ ] Electrical
- [ ] Utility > 600 V
- [ ] Civil
- [ ] Geotechnical
- [ ] Environmental
- [ ] Fueling
- [ ] Radio Freq. Coord.
- [ ] Corrosion Protection
- [ ] Elevator/Escalator
- [ ] Other

ATTACHMENTS
- [ ] Document List
- [ ] Contract Drawings
- [ ] Contract Specifications
- [ ] Tenant Response
- [ ] Computations
- [ ] Reports
- [ ] Catalog Cuts
- [ ] Other

SPECIAL INSTRUCTIONS

DESCRIPTION

~~OFFICE COPY~~

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV.
DESIGN STANDARDS

MAY 14 1999
W98-7134 (8)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

Copy to: T. Koebel, J. Napolitano, E. Monteverde,
~~J. Richardson, N. Soliga, F. Varriano~~
J. GERTLER (Proj. Mgr.)

R. LYNCH (Zone Prop. Mgr.)

Jeffrey Gertler
Signature

Memorandum

TO: Jeffrey Gertler, PA

FROM: Joseph Aliotta

SUBJECT: Mayor's Office of Emergency Management (MOEM)
"Emergency Operations Center – 7 World Trade Center"
Responses to PA Attachment List of Comments – Submission # 7 – Conditional Approval

SHCA Project No: 5576A

PA TAA # 987134

DATE: May 10, 1999

In response to Port Authority comments submission #7 dated April 23, 1999 the following is the requested written response:

STRUCTURAL

1. Drawing A-1-1, Details 11:
   a) Verify with calculations that the existing construction is not overstressed under the added loads of the fuel line enclosure.

Response: See attached calculations.

   b) Indicate the spacing of the pipe posts.

Response: 10 foot maximum. (see attached drawings)

   c) Indicate the inbedment length of the expansion bolts connecting base plates to the slab below.

Response: Imbedment length to be 6" (see attached drawings)

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PORT AUTHORITY OF N.Y. & N.J.
ENGD PT QUALITY ASSURANCE DIV
DESIGN STANDARDS
MAY 14 1999
W98-7134 (8)
RECEIVED
OPERATIONS APPLICATION
CONSTRUCTION REVIEW UNIT

W:\5576\A\OEM\Docs\Specs\Response Submission 7 05-05-99.doc

Swanke Hayden Connell Ltd /Swanke Hayden Connell & Partners LLP
295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059

THE CANTOR SEINUK GROUP P.C.
600 MADISON AVENUE • NEW YORK, NEW YORK 10022 • TEL (212) 755-4242 • FAX (212) 752-6924

OEM

SEVEN WORLD TRADE CENTER
NEW YORK, NY

OFFICE COPY

TENANT ALTERATIONS

PORT AUTHORITY OF N.Y. & N.J.
RECORDING DEPT. QUALITY ASSURANCE DIV.
DESIGN STANDARDS
MAY 14 1999
W 98-7139 (8)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

STRUCTURAL CALCULATIONS
MAY 1999

PROF YSRAEL A. SEINUK, P.E., CEng, FACI, FICE, FASCE, *Chief Executive Officer* • SILVIAN MARCUS, P.E., *President*
ESTANISLAO SALCEDO, P.E., *Senior Vice President* • AHMAD RAHIMIAN, P.E., Ph.D., *Vice President*
JEFFREY SMILOW, P.E., *Vice President* • KAMRAN MOAZAMI, P.E., *Vice President*

THE CANTOR SEI. .K GROUP, P.C.
CONSULTING ENGINEERS
600 Madison Avenue
New York, N.Y. 10022
(212) 755-4242 FAX (212) 752-6924

JOB OEM
SHEET NO 7 OF
CALCULATED BY AB DATE 5.3.99
CHECKED BY DATE
SCALE 1ST FL. FUEL LINE SUPPORT

SEE ARCH. SK-58

Weight of enclosure — conservative

$1.75' \times 1.66' \times 150 PCF = 436 PLF +$

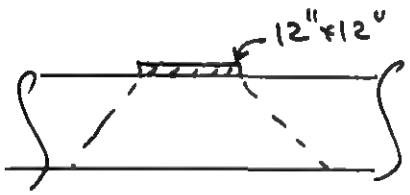
25 - pipes

461 PLF - consider 500 PLF

Max. span bet. posts = 10' ∴ R = 2.5^k ea. post.

Slab at elevators core area is composed by 1'-2" slab on backfill gravel — reinf. with #5@12 T & Bott. and steel beams encased into slab to provide a diaphragm system.

Check slab under base plate :

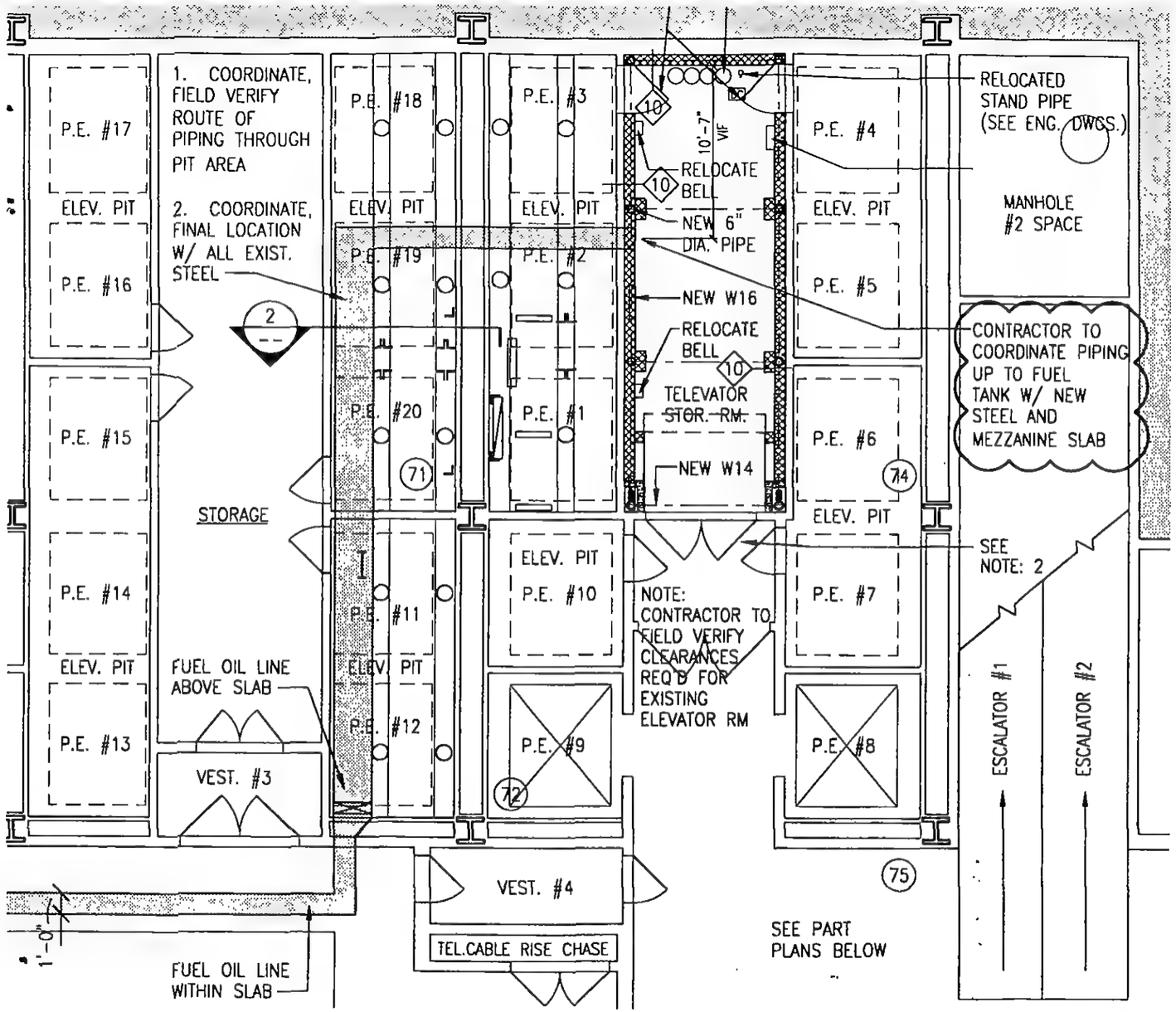


$\phi V_c = 2\sqrt{4000} \times 12' \times 12/1000 = 18.2^k > 2.5^k$

Slab is supported on backfill and the punching shear is much longer than R = 2.5^k

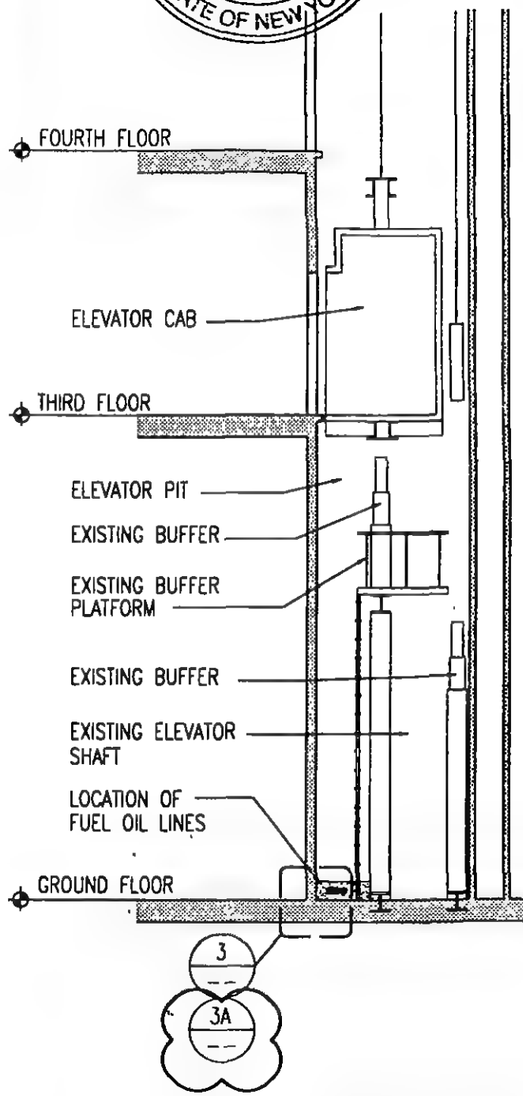
∴ - slab is O.K.

SWANKE HAYDEN CONNELL ARCHITECTS

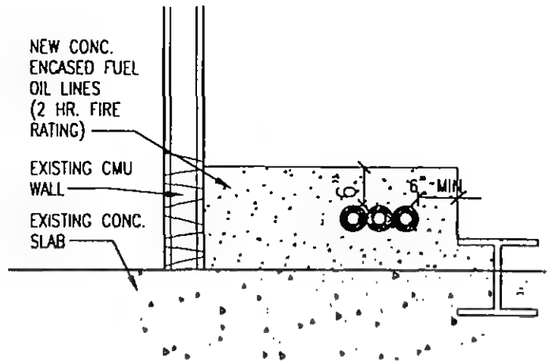


1 PART PLAN RM# 23-09
1/8" = 1'-0"

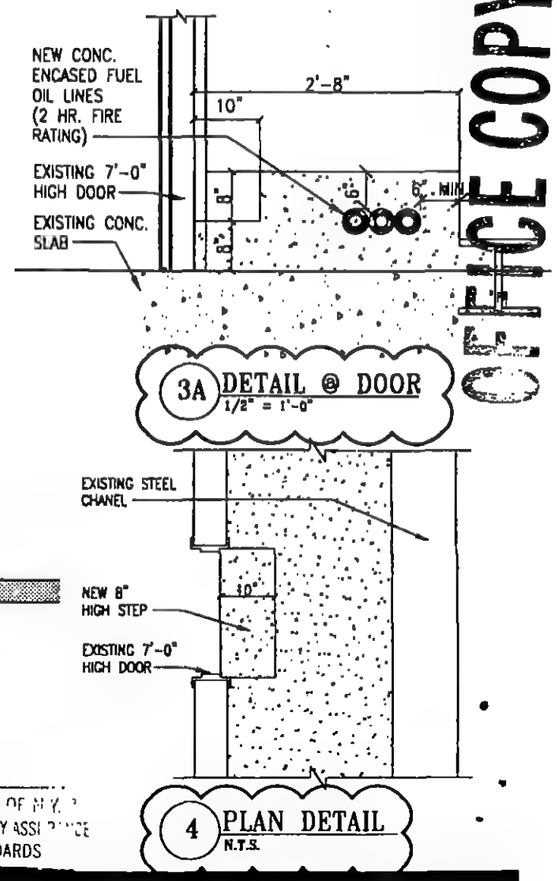
REGISTERED ARCHITECT
CARL R. MEINHARDT
10296
STATE OF NEW YORK



2 SCHEMATIC SECTION
1/8" = 1'-0"



3 DETAIL
1/2" = 1'-0"



3A DETAIL @ DOOR
1/2" = 1'-0"

4 PLAN DETAIL
N.T.S.

PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS

OFFICE COPY

No.	Date	Revisions

Job Title/Drawing Title
MAYORS OFFICE OF EMERGENCY MANAGEMENT
ALT. ROUTE FOR OIL PIPES

Swanke Hayden Connell Ltd
295 Lafayette St., New York, New York 10012
212 226 9696, Fax 212 219 0059

DEC 11 1998
W98-7134
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

Scale
AS NOTED
Drawn By
FSK-50
Issued
11/24/98
Job No.
5576A

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THE PORT AUTHORITY OF NY & NJ

THE PORT AUTHORITY OF NY & NJ
QUALITY ASSURANCE DIV.
ENGINEERING DEPT
ONE WORLD TRADE CENTER
NEW YORK, NY 10048
(212) 435-7000
(973) 961-6600
APR 27 1999
RECEIVED
NOTED
REFERRED TO W98-7134

April 23, 1999

Swanke Hayden Connell Architects
295 Lafayette Street
New York, N.Y. 10012

Subject: 7 WORLD TRADE CENTER – 23rd FLOOR
MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA 987.134
SUBMISSION #7 - CONDITIONAL APPROVAL

Dear Mr. Joseph Aliotta:

This letter responds to your submittal dated April 14, 1999, forwarding for review the documents listed in Attachment A to this letter. Tenant Alteration Application # 987.134 has been approved subject to compliance with the comments listed in Attachment B to this letter.

Incorporate the requirements of the comments into the construction documents, respond to each comment in writing, and submit six (6) sets of the revised documents by May 7, 1999. The revised documents shall be signed and sealed by the Engineer or Architect-of-record who is licensed to practice in the State of New York. Indicate the latest revision number on each drawing in the title box, circle each revision and indicate the latest revision number inside a triangle. Your co-operation in meeting the submission date for comment resolution will assist in meeting your client's schedule for occupancy.

Any changes to the already approved scope-of-work must be submitted to the Port Authority for review and approval prior to the commencement of associated work. Only contract documents reviewed and approved by this office are to be released in the field for construction.

All correspondence or inquiries should be directed to Jeffrey Gertler, Port Authority, One World Trade Center, 88 South, New York, N.Y. 10048, (212) 435-4531.

Sincerely,

Jeffrey Gertler

for Joseph Napolitano
Supervisor, Tenant Alteration Applications
The World Trade Department

cc: Walter Weems, Silverstein Properties, 7 World Trade Center, New York, N.Y. 10048

bcc: S. Bhol, J. Castaldo, A. Fadavi, J. Gertler, T. Koebel, R. Lynch, L. Menno, E. Monteverde, S. Murray, J. Napolitano, R. Rafferty, J. Ruiz, Central File, Chrono File

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S OFFICE EMERGENCY MANAGEMENT
TAA – 987134
SUBMISSION #7

DRAWING NO.		
A-1-1	**revised**	**03/30/99**

042399

ATTACHMENT B – LIST OF COMMENTS
7 WTC – MAYOR'S OFFICE EMERGENCY MANAGEMENT
TAA – 987134
SUBMISSION #7

QUALITY ASSURANCE DIVISION COMMENTS

STRUCTURAL

1. Drawing A-1-1, Detail 11:

   a) Verify with calculations that the existing construction is not overstressed under the added loads from Fuel Line Enclosure.

   b) Indicate the spacing of the pipe posts.

   c) Indicate the embedment length of the expansion bolts connecting base plates to the slab below.

042399

7

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

M E M O R A N D U M

To: Ms. Teresa Koebel, Manager, World Trade Project Management
From: C. John Lin, P.E.
Date: April 20, 1999
Subject: **WTC - ALTERATION APPLICATION W-987134 - MAYOR'S OFFICE OF EMERGENCY MANAGEMENT - 7 WTC, 1ST, 7TH, 23RD FLOORS AND ROOF**

Reference: Review Request dated 4/14/99

Copy To: A. Fadavi, J. Napolitano, R. Rafferty, J. Richardson, Job Folder, Chrono Folder

A review of the material submitted with the referenced request has been made.

The previous recommendation that **approval** to proceed with construction be given **subject to...**, remains unchanged pending submission of the items listed below being revised in accordance with the **one (1) requirement** listed on the attached rider.

Drawings:

REMARKS: 1) Please see the attachment for a revised list of drawings recommended for approval.

2) This memorandum was transmitted to the Facility via OA on April 20, 1999.

C. John Lin, P.E.
Manager
Quality Assurance Division

I.D.: W98-7134-007
OMC/mt
Att.

Reviewers:
O.M. Clemente, Mechanical and Coordinator; V. Tsin, Structural.

RIDER

ALTERATION APPLICATION W-987134

STRUCTURAL

1. Drawing A-1-1, Detail 11:

   a) Verify with calculations that the existing construction is not overstressed under the added loads from Fuel Line Enclosure.

   b) Indicate the spacing of the pipe posts.

   c) Indicate the embedment length of the expansion bolts connecting base plates to the slab below.

ATTACHMENT

ALTERATION APPLICATION W-987134

Subject to compliance with the requirements listed in this memorandum's rider, the following is a revised list of drawings recommended for approval. All changes from the previous list are shown in **boldface**:

Drawing		
T-1	revised	09/25/98
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Drawing (cont'd)

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AV-2	revised	05/04/98
AV-3	revised	05/04/98
AV-4	revised	05/04/98
AV-EO	revised	05/04/98
AV-E1	revised	07/24/98
AV-E2	revised	05/04/98
AV-E3	revised	05/04/98
AV-E4	revised	05/04/98
AV-E5	revised	05/04/98
AV-S1	revised	05/04/98
AV-S3	revised	05/04/98
AV-S2	revised	05/04/98
AV-S4	revised	05/04/98
AV-S5	revised	05/04/98
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AV-S7	revised	07/24/98
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TC-101	revised	09/25/98
TC-103	revised	05/04/98
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TC-103B	revised	05/04/98

Drawing (cont'd)

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22A.1	dated	10/28/98
66	dated	10/28/98
67	dated	10/28/98
S-R.A	dated	10/20/98

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

TENANT ALTERATION APPLICATION REVIEW REQUEST

5/3

DISTRIBUTION		
No.	To	Facility
4	QAD	5IN
1	D. Warren	PATC Zip43
~~1~~	~~S.F. Cinko~~	~~88 S~~
~~1~~	~~G. Daly~~	~~88 S~~
~~1~~	~~B. Brown~~	~~88 S~~
~~1~~	~~P. DeMartini/Nick Strenk - LSRA~~	~~2 WTC 57th Fl~~
~~1~~	~~J. Bonbello~~	~~2 WTC 57th Fl~~
~~1~~	~~B. Devlin~~	~~2 WTC 57th Fl~~
~~1~~	~~P. Negron~~	~~2 WTC 57th Fl~~
~~1~~	~~B. Hamman~~	~~2 WTC 57th Fl~~

Facility 7 WTC TAA No. 987134 Date 4/14/99

Application/Tenant MAYOR'S OFFICE

Consultant SWANKE HAYDEN

Estimated Cost _____ Submittal No. 7

Description of Work

REPLY TO COMMENT ON FUEL LINE

Please review the attached (revised) application and send comments to: [redacted]

Name: Jeff Gertler

Location: 1 WTC, 88S Phone No. 435-4531
Fax No.: 435-8168

4-28-99
Due Date

DESIGN DISCIPLINES
- [ ] Architectural
- [ ] Egress Analysis
- [ ] Structural
- [ ] HVAC
- [ ] Plumbing
- [ ] Sprinkler
- [ ] Electrical
- [ ] Utility > 600 V
- [ ] Civil
- [ ] Geotechnical
- [ ] Environmental
- [ ] Fueling
- [ ] Radio Freq. Coord.
- [ ] Corrosion Protection
- [ ] Elevator/Escalator
- [ ] Other

ATTACHMENTS
- [ ] Document List
- [ ] Contract Drawings
- [ ] Contract Specifications
- [ ] Tenant Response
- [ ] Computations
- [ ] Reports
- [ ] Catalog Cuts
- [ ] Other

SPECIAL INSTRUCTIONS

DESCRIPTION

OFFICE COPY

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV.
DESIGN STANDARDS
APR 14 1999
W98-7134
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

7

Copy to: T. Koebel, J. Napolitano, E. Monteverde,
~~J. Richardson, N. Seliga, F. Varriano~~
J. GERTLER (Proj. Mgr.)

R. LYNCH (Zone Prop. Mgr.)

Jeffrey Gertler
Signature

5 DAY REVIEW REQUEST

Memorandum

TO: Jeffrey Gertler, PA

FROM: Joseph Aliotta

OFFICE COPY

SUBJECT: Mayor's Office of Emergency Management (MOEM)
"Emergency Operations Center – 7 World Trade Center"
Responses to PA Attachment List of Comments – Submission # 6 – Conditional Approval

SHCA Project No: 5576A

PA TAA # 987134

DATE: April 12, 1999

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT/QUALITY ASSURANCE DIV
DESIGN STANDARDS
APR 14 1999
W98-7134 (7)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

In response to Port Authority comments submission #6 dated February 23, 1999 the following is the requested written response:

STRUCTURAL

1. Drawing A-1-1, Details 2 and 3 indicate hanger reactions on the supporting beams and walls. Verify with calculations that the existing construction is not overstressed under the added loads.

Response: Not applicable.

MECHANICAL

2. Drawing A-1-1. Running the fuel oil piping into the elevator shaft 10 feet above the ground is not acceptable. The NYC Building Code, RS-18 rule 102.2(d) prohibits installation in the hoistway (shaft) of any pipes or ducts conveying gases, vapors, or liquids not used in connection with the operation of the elevator. 2-hour spray fireproofing of the pipe conduit is not a substitute for fire rated enclosure as require by the NYC Building Code, Section 27-830(f)(2). In the previous design, these pipe where in a conduit at the bottom of the pit floor along the wall, and encased in concrete which is acceptable. (See Drawing FSK-50, dated11/24/98). Please revise design to comply.

Response: See revised drawing A-1-1.

3. Drawing A-1-1 and M1.01. The previous design provides oil sump (drum with leak detection) for the oil to drain from the conduit and the shaft complying with Code Section 27-830(f) (3). Since the new design eliminates the oil sump, clarify how oil in case of leakage will be drained as required by code.

Response: See revised drawing A-1-1.

Swanke Hayden Connell Ltd./Swanke Hayden Connell & Partners LLP
295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059

THE PORT AUTHORITY OF NY & NJ

ONE WORLD TRADE CENTER
NEW YORK, NY 10048

(212) 435-7000
(973) 961-6600

February 23, 1999

Swanke Hayden Connell Architects
295 Lafayette Street
New York, N.Y. 10012

Subject: 7 WORLD TRADE CENTER – 23rd FLOOR
MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA 987.134
SUBMISSION #6 - CONDITIONAL APPROVAL

Dear Mr. Joseph Aliotta:

This letter responds to your submittal dated February 1, 1999, forwarding for review the documents listed in Attachment A to this letter. Tenant Alteration Application # 987.134 has been approved subject to compliance with the comments listed in Attachment B to this letter.

Incorporate the requirements of the comments into the construction documents, respond to each comment in writing, and submit eight (8) sets of the revised documents by March 5, 1999. The revised documents shall be signed and sealed by the Engineer or Architect-of-record who is licensed to practice in the State of New York. Indicate the latest revision number on each drawing in the title box, circle each revision and indicate the latest revision number inside a triangle. Your co-operation in meeting the submission date for comment resolution will assist in meeting your client's schedule for occupancy.

Any changes to the already approved scope-of-work must be submitted to the Port Authority for review and approval prior to the commencement of associated work. Only contract documents reviewed and approved by this office are to be released in the field for construction.

All correspondence or inquiries should be directed to Jeffrey Gertler, Port Authority, One World Trade Center, 88 South, New York, N.Y. 10048, (212) 435-4531.

Sincerely,

Joseph Napolitano
Supervisor, Tenant Alteration Applications
The World Trade Department

cc: Silverstein Properties, Walter Weems

THE PORT AUTHORITY OF NY & NJ
QUALITY ASSURANCE DIV.
ENGINEERING DEPT.
FEB 25 1999
RECEIVED
NOTED:
REFERRED TO: W98-7134

bcc: S. Bhol, J. Castaldo, A. Fadavi, J. Gertler, T. Koebel, R. Lynch, L. Menno, E. Monteverde, S. Murray, J. Napolitano, R. Rafferty, J. Ruiz, Central File, Chrono File

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA – 987134
SUBMISSION # 6

Subject to compliance with the requirements listed in this letter, the following is a revised list of drawings recommended for conditional approval. All changes from the previous list are shown in **boldface**:

Drawing		
T-1	revised	09/25/98
A-EG-23	revised	09/25/98
A-1-1	**revised**	**01/26/99**
A-7-1	revised	07/24/98
A-23-1	revised	09/25/98
A-23-2	revised	07/24/98
A-23-3	revised	09/25/98
A-23-4	revised	09/25/98
A-23-5	revised	05/04/98
A-23-6	revised	05/04/98
A-48-1	revised	05/04/98
D-O	revised	09/25/98
D-1	revised	09/25/98
D-2	revised	07/24/98
D-3	revised	05/04/98
D-4	revised	09/25/98
D-5	revised	05/04/98
D-6	revised	07/24/98
D-7	revised	07/24/98
D-8	revised	05/04/98
D-9	revised	07/24/98
D-10	revised	09/25/98
D-11	revised	07/24/98
D-12	revised	05/04/98
D-13	revised	09/25/98
Workstation Plan	revised	05/04/98
Panel/Energy Plan	revised	05/04/98
M1.01	revised	09/25/98
M1.07	revised	09/25/98
M1.23	revised	09/25/98
M4.01	revised	09/25/98
E0.01	revised	05/15/98
E1.01	revised	09/25/98
E1.07	revised	07/24/98

TACHMENT A – LIST OF DRA. NGS
7 WTC – MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA – 987134
SUBMISSION # 6

E1.48	revised	05/04/98
E6.01	revised	05/04/98
E6.02	revised	05/04/98
E2.23	revised	09/25/98
E3.01	revised	09/25/98
E4.01	revised	09/25/98
E4.02	revised	09/25/98
E4.03	revised	09/25/98
P1.01	revised	05/13/98
P2.07	revised	05/13/98
P3.23	revised	09/25/98
P4.23	revised	09/25/98
P5.23	revised	05/13/98
FP1.01	revised	09/25/98
FP2.07	revised	05/13/98
FP3.23	revised	05/15/98
FP4.23	revised	09/25/98
FP5.23	revised	05/15/98
FP6.23	revised	05/13/98
TC-101	revised	05/13/98
S-1	revised	12/07/98
S-2	revised	12/07/98
S-3	revised	09/25/98
S-4	revised	12/07/98
S-5	revised	12/07/98
038Z001	revised	07/24/98
038L002	revised	07/24/98
038L003	revised	07/24/98
038L005	revised	05/15/98
H5	dated	03/08/98
AV-1	revised	05/04/98
AV-2	revised	05/04/98
AV-3	revised	05/04/98
AV-4	revised	05/04/98
AV-EO	revised	05/04/98
AV-E1	revised	07/24/98
AV-E2	revised	05/04/98
AV-E3	revised	05/04/98
AV-E4	revised	05/04/98
AV-E5	revised	05/04/98

TACHMENT A – LIST OF DRA. .NGS
7 WTC – MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA – 987134
SUBMISSION # 6

AV-S1	revised	05/04/98
AV-S3	revised	05/04/98
AV-S2	revised	05/04/98
AV-S4	revised	05/04/98
AV-S5	revised	05/04/98
AV-S6	revised	07/24/98
AV-S7	revised	07/24/98
AV-S8	revised	05/04/98
TC-100	revised	05/04/98
TC-101	revised	09/25/98
TC-103	revised	05/04/98
TC-103A	revised	05/04/98
TC-103B	revised	05/04/98
FSK-26	revised	11/09/98
FSK-27	revised	11/09/98
FSK-41	dated	11/04/98
FSK-42	dated	11/06/98
FSK-50	dated	11/24/98
SKP-1	revised	11/03/98
SKP-2	revised	11/03/98
S-7.1	dated	09/28/98
S-7.2	dated	09/28/98
S-S.1	dated	10/15/98
S-FS-7	dated	10/15/98
SKS-S-2	dated	10/16/98
22A.1	dated	10/28/98
66	dated	10/28/98
67	dated	10/28/98
S-R.A	dated	10/20/98

ATTACHMENT B – LIST OF COMMENTS
7 WTC – MAYOR'S OFFICE EMERGENCY MANAGEMENT
TAA – 987134
SUBMISSION #6

QUALITY ASSURANCE DIVISION COMMENTS

STRUCTURAL

1. Drawing A-1-1, Details 2 and 3. Indicate hanger reactions on the supporting beams and walls. Verify with calculations that the exiting construction is not overstressed under the added loads.

MECHANICAL

2. Drawing A-1-1. Running the fuel oil piping into the elevator shaft 10 feet above the ground floor is not acceptable. The NYC Building Code, RS-18, Rule 102.2(d) prohibits installation in the hoistway (shaft) of any pipes or ducts conveying gases, vapors, or liquids not used in connection with the operation of the elevator. 2-hour spray fire proofing of the pipe conduit is not a substitute for fire-rated enclosure as required by the NYC Building Code, Section 27-830(f)(2). In the previous design, these pipes were in a conduit at the bottom of the pit floor along the wall, and encased in concrete which is acceptable. (See Drawing FSK-50, dated 11/24/98). Please revise design to comply.

3. Drawings A-1-1 and M1.01. The previous design provides oil sump (drum with leak detection) for the oil to drain from the conduit and the shaft complying with Code Section 27-830(f)(3). Since the new design eliminates the oil swamp, clarify how oil in case of leakage will be drained as required by the Code.

6

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

M E M O R A N D U M

To: Ms. Teresa Koebel, Manager, World Trade Project Management
From: C. John Lin, P.E.
Date: February 23, 1999
Subject: WTC - ALTERATION APPLICATION W-987134 - 7 WTC - MAYOR'S OFFICE - 7 WTC, 1ST, 7TH, 23RD FLOORS AND ROOF - MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

Reference: Review Request dated 2/1/99

Copy To: A. Fadavi, J. Napolitano, R. Rafferty, J. Richardson, Job Folder, Chrono Folder

A review of the material submitted with the referenced request has been made.

The previous recommendation of **approval** to proceed with construction remains unchanged **subject** to the submission of the items **listed** below being revised in accordance with the **three (3) requirements** listed on the attached rider.

Drawings:

REMARKS: 1) Please see the attachment for a revised list of drawings recommended for approval.

2) This memorandum was transmitted to the Facility via OA on February 23, 1999.

for C. John Lin, P.E.
Manager
Quality Assurance Division

I.D.: W98-7134-006
OMC/al
Att.

Reviewers:
O.M. Clemente, Coordinator and HVAC; V. Tsin, Structural.

RIDER

ALTERATION APPLICATION W-987134

STRUCTURAL

1. Drawing A-1-1, Details 2 and 3. Indicate hanger reactions on the supporting beams and walls. Verify with calculations that the exiting construction is not overstressed under the added loads.

MECHANICAL

2. Drawing A-1-1. Running the fuel oil piping into the elevator shaft 10 feet above the ground floor is not acceptable. The NYC Building Code, RS-18, Rule 102.2(d) prohibits installation in the hoistway (shaft) of any pipes or ducts conveying gases, vapors, or liquids not used in connection with the operation of the elevator. 2-hour spray fire proofing of the pipe conduit is not a substitute for fire-rated enclosure as required by the NYC Building Code, Section 27-830(f)(2). In the previous design, these pipes were in a conduit at the bottom of the pit floor along the wall, and encased in concrete which is acceptable. (See Drawing FSK-50, dated 11/24/98). Please revise design to comply.

3. Drawings A-1-1 and M1.01. The previous design provides oil sump (drum with leak detection) for the oil to drain from the conduit and the shaft complying with Code Section 27-830(f)(3). Since the new design eliminates the oil swamp, clarify how oil in case of leakage will be drained as required by the Code.

ATTACHMENT

ALTERATION APPLICATION W-987134

Subject to compliance with the requirements listed in this memorandum's rider, the following is a revised list of drawings recommended for approval. All changes from the previous list are shown in **boldface**:

Drawing		
T-1	revised	09/25/98
A-EG-23	revised	09/25/98
A-1-1	**revised**	**01/26/99**
A-7-1	revised	07/24/98
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E1.07	revised	07/24/98
E1.48	revised	05/04/98
E6.01	revised	05/04/98
E6.02	revised	05/04/98
E2.23	revised	09/25/98
E3.01	revised	09/25/98
E4.01	revised	09/25/98

Drawing (cont'd)

E4.02	revised	09/25/98
E4.03	revised	09/25/98
P1.01	revised	05/13/98
P2.07	revised	05/13/98
P3.23	revised	09/25/98
P4.23	revised	09/25/98
P5.23	revised	05/13/98
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TC-100	revised	05/04/98
TC-101	revised	09/25/98
TC-103	revised	05/04/98
TC-103A	revised	05/04/98
TC-103B	revised	05/04/98

Drawing (cont'd)

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FSK-27	revised	11/09/98
FSK-41	dated	11/04/98
FSK-42	dated	11/06/98
FSK-50	dated	11/24/98
SKP-1	revised	11/03/98
SKP-2	revised	11/03/98
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S-7.2	dated	09/28/98
S-S.1	dated	10/15/98
S-FS-7	dated	10/15/98
SKS-S-2	dated	10/16/98
22A.1	dated	10/28/98
66	dated	10/28/98
67	dated	10/28/98
S-R.A	dated	10/20/98

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
TENANT 'ERATION APPLICATION REV REQUEST 2/23

DISTRIBUTION		
No.	To	Facility
4	QAD	51N
1	D. Warren	PATC Zip43
~~1~~	~~S.B. Ghiso~~	~~88 S~~
~~1~~	~~G. Daly~~	~~88 S~~
~~1~~	~~D. Brown~~	~~88 S~~
~~1~~	~~F. DeMartini/Nick Strenk - LERA~~	~~2 WTC 37th Fl~~
~~1~~	~~J. Barbella~~	~~2 WTC 37th Fl~~
~~1~~	~~P. Devlin~~	~~2 WTC 37th Fl.~~
~~1~~	~~D. Negron~~	~~2 WTC 37th Fl~~
~~1~~	~~D. Hamman~~	~~2 WTC 37th Fl~~

Facility 7 WTC TAA No. 987134 Date 2/1/99

Application/Tenant MAYOR'S OFFICE

Consultant SWANKE HAYDEN

Estimated Cost _____ Submittal No. 6

Description of Work

RELOCATION OF FUEL LINE

Please review the attached (revised) application and send comments to: [redacted]

Name: Jeff Gertler

Location: 1 WTC, 88S Phone No. 435-4531
Fax No.: 435-8168

2/12/99 Due Date

DESIGN DISCIPLINES

- [X] Architectural
- [ ] Egress Analysis
- [ ] Structural
- [ ] HVAC
- [ ] Plumbing
- [ ] Sprinkler
- [ ] Electrical
- [ ] Utility > 600 V
- [ ] Civil
- [ ] Geotechnical
- [ ] Environmental
- [ ] Fueling
- [ ] Radio Freq. Coord.
- [ ] Corrosion Protection
- [ ] Elevator/Escalator
- [ ] Other

ATTACHMENTS

- [ ] Document List
- [ ] Contract Drawings
- [ ] Contract Specifications
- [ ] Tenant Response
- [ ] Computations
- [ ] Reports
- [ ] Catalog Cuts
- [ ] Other

SPECIAL INSTRUCTIONS

DESCRIPTION

OFFICE COPY

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV.
~~DESIGN STANDARDS~~
FEB - 3 1999
W98-7134 (6)
RECEIVED
ALTERATIONS APPLICATION
~~TENANT CONSTRUCTION REVIEW UNIT~~

Copy to: T. Koebel, J. Napolitano, E. Monteverde,
~~J. Richardson, N. Scliga, F. Varriano~~
J. GERTLER (Proj. Mgr.)

R. LYNCH (Zone Prop. Mgr.)

Jeffrey Gertler
Signature

THE PORT AUTHORITY OF NY & NJ

E WORLD TRADE CENTER
NEW YORK, NY 10048

(212) 435-7000
(201) 961-6600

THE PORT AUTHORITY OF NY & NJ
QUALITY ASSURANCE DIV.
ENGINEERING DEPT.
DEC 23 1998
RECEIVED
NOTED
REFERRED TO VV98-7134

December 21,1998

Swanke Hayden Connell Architects
295 Lafayette Street
New York, N.Y. 10012

Subject: 7 WORLD TRADE CENTER – 23rd FLOOR
MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA 987.134
SUBMISSION #5 - CONDITIONAL APPROVAL

Dear Mr. Joseph Aliotta:

This letter responds to your submittal dated December 14, 1998, forwarding for review the documents listed in Attachment A to this letter. Tenant Alteration Application # 987.134 has been approved subject to compliance with the comments listed in Attachment B to this letter.

Incorporate the requirements of the comments into the construction documents, respond to each comment in writing, and submit eight (8) sets of the revised documents by January 5, 1999. The revised documents shall be signed and sealed by the Engineer or Architect-of-record who is licensed to practice in the State of New York. Indicate the latest revision number on each drawing in the title box, circle each revision and indicate the latest revision number inside a triangle. Your co-operation in meeting the submission date for comment resolution will assist in meeting your client's schedule for occupancy.

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All correspondence or inquiries should be directed to Jeffrey Gertler, Port Authority, One World Trade Center, 88 South, New York, N.Y. 10048, (212) 435-4531.

Sincerely,

Joseph Napolitano
Supervisor, Tenant Alteration Applications and Base Building Programs
The World Trade Department

cc: Silverstein Properties, Walter Weems

bcc: D. Bergstein, S. Bhol, A. Fadavi, J. Gertler, T. Koebel, R. Lynch, L. Menno, E. Monteverde, S. Murray, J. Napolitano, J. Protas, R. Rafferty, Central File, Chrono File

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA – 987134
SUBMISSION # 5

Subject to compliance with the requirements listed in this letter, the following is a revised list of drawings recommended for approval. All changes from the previous list are shown in **boldface**:

Drawing		
T-1	revised	09/25/98
A-EG-23	revised	09/25/98
A-1-1	revised	09/25/98
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A-23-1	revised	09/25/98
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A-23-5	revised	05/04/98
A-23-6	revised	05/04/98
A-48-1	revised	05/04/98
D-O	revised	09/25/98
D-1	revised	09/25/98
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D-5	revised	05/04/98
D-6	revised	07/24/98
D-7	revised	07/24/98
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D-9	revised	07/24/98
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M1.07	revised	09/25/98
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E0.01	revised	05/15/98
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E1.07	revised	07/24/98

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA – 987134
SUBMISSION # 5

E1.48	revised	05/04/98
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S-1	**revised**	**12/07/98**
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S-3	revised	09/25/98
S-4	**revised**	**12/07/98**
S-5	**revised**	**12/07/98**
038Z001	revised	07/24/98
038L005	revised	05/15/98
038L002	revised	07/24/98
038L003	revised	07/24/98
H5	dated	03/08/98
AV-1	revised	05/04/98
AV-2	revised	05/04/98
AV-3	revised	05/04/98
AV-4	revised	05/04/98
AV-EO	revised	05/04/98
AV-E1	revised	07/24/98
AV-E2	revised	05/04/98
AV-E3	revised	05/04/98
AV-E4	revised	05/04/98
AV-E5	revised	05/04/98

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA – 987134
SUBMISSION # 5

AV-S1	revised	05/04/98
AV-S3	revised	05/04/98
AV-S2	revised	05/04/98
AV-S4	revised	05/04/98
AV-S5	revised	05/04/98
AV-S6	revised	07/24/98
AV-S7	revised	07/24/98
AV-S8	revised	05/04/98
TC-100	revised	05/04/98
TC-101	revised	09/25/98
TC-103	revised	05/04/98
TC-103A	revised	05/04/98
TC-103B	revised	05/04/98
FSK-26	revised	11/09/98
FSK-27	revised	11/09/98
FSK-41	dated	11/04/98
FSK-42	dated	11/06/98
FSK-50	**dated**	**11/24/98**
SKP-1	revised	11/03/98
SKP-2	revised	11/03/98
S-7.1	dated	09/28/98
S-7.2	dated	09/28/98
S-S.1	dated	10/15/98
S-FS-7	dated	10/15/98
SKS-S-2	dated	10/16/98
22A.1	dated	10/28/98
66	dated	10/28/98
67	dated	10/28/98
S-R.A	dated	10/20/98

ATTACHMENT B – LIST OF COMMENTS
7 WTC – MAYOR'S OFFICE EMERGENCY MANAGEMENT
TAA – 987134
SUBMISSION #5

QUALITY ASSURANCE DIVISION COMMENTS

ARCHITECTURAL AND ELECTRICAL

1. Doors 40A and 40B. The response to the previous Rider, Comment 1 is noted. The concept of a direct release of the magnetic locks by the fire alarm system is acceptable. However, it is contradicted by the Vikonics drawings that have been submitted to date, which show an access control system interposed between the door locks and the fire alarm system. The Vikonics access control system does not have approval for use in the City of New York. Revise the signed-and-sealed contract documents to clearly show that the fire alarm system connections are only to New York City-approved apparatus, and provide the model and MEA numbers of the apparatus to which the fire alarm system will be connected. (Modified repeat comment)

5

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

M E M O R A N D U M

To: Ms. Teresa Koebel, Manager, World Trade Project Management
From: C. John Lin, P.E.
Date: December 18, 1998
Subject: **WTC - ALTERATION APPLICATION W98-7134 - 7 WTC - MAYOR'S EMERGENCY MANAGEMENT OFFICE**

Reference: Review Request dated 12/11/98

Copy To: J. Castaldo, A. Fadavi, M. Pinegold, L. Menno, J. Napolitano, K. Piatt, R. Rafferty, Job Folder, Chrono Folder

A review of the material submitted with the referenced request has been made.

The previous recommendation of approval to proceed with construction remains **unchanged subject** to the submission of the items listed below being revised in accordance with the **one (1) requirement** listed on the attached rider.

Drawings: Calculations:

Resolutions:

REMARKS: 1) See the attachment for a revised list of drawings recommended for approval.

2) This memorandum was transmitted to the Facility via OA on December 18, 1998.

C. John Lin, P.E.
Manager
Quality Assurance Division

I.D.: W98-7134-005
MP/al
Att.

Reviewers:
M. Palmieri, Coordinator & Architectural; A. Rohssler, Electrical;
O.M. Clemente, Mechanical; H. MacDonald, Plumbing; V. Tsin, Structural;
D. Luey, Fire Protection.

RIDER

ALTERATION APPLICATION W-987134

ARCHITECTURAL AND ELECTRICAL

1. Doors 40A and 40B. The response to the previous Rider, Comment 1 is noted. The concept of a direct release of the magnetic locks by the fire alarm system is acceptable. However, it is contradicted by the Vikonics drawings that have been submitted to date, which show an access control system interposed between the door locks and the fire alarm system. The Vikonics access control system does not have approval for use in the City of New York. Revise the signed-and-sealed contract documents to clearly show that the fire alarm system connections are only to New York City-approved apparatus, and provide the model and MEA numbers of the apparatus to which the fire alarm system will be connected. (Modified repeat comment)

121898

ATTACHMENT

ALTERATION APPLICATION W-987134

Subject to compliance with the requirements listed in this memorandum's rider, the following is a revised list of drawings recommended for approval. All changes from the previous list are shown in **boldface**:

Drawing		
T-1	revised	09/25/98
A-EG-23	revised	09/25/98
A-1-1	revised	09/25/98
A-7-1	revised	07/24/98
A-23-1	revised	09/25/98
A-23-2	revised	07/24/98
A-23-3	revised	09/25/98
A-23-4	revised	09/25/98
A-23-5	revised	05/04/98
A-23-6	revised	05/04/98
A-48-1	revised	05/04/98
D-0	revised	09/25/98
D-1	revised	09/25/98
D-2	revised	07/24/98
D-3	revised	05/04/98
D-4	revised	09/25/98
D-5	revised	05/04/98
D-6	revised	07/24/98
D-7	revised	07/24/98
D-8	revised	05/04/98
D-9	revised	07/24/98
D-10	revised	09/25/98
D-11	revised	07/24/98
D-12	revised	05/04/98
D-13	revised	09/25/98
Workstation Plan	revised	05/04/98
Panel/Energy Plan	revised	05/04/98
M1.01	revised	09/25/98
M1.07	revised	09/25/98
M1.23	revised	09/25/98
M4.01	revised	09/25/98
E0.01	revised	05/15/98
E1.01	revised	09/25/98
E1.07	revised	07/24/98
E1.48	revised	05/04/98
E6.01	revised	05/04/98
E6.02	revised	05/04/98
E2.23	revised	09/25/98
E3.01	revised	09/25/98
E4.01	revised	09/25/98

Drawing (cont'd)

E4.02	revised	09/25/98
E4.03	revised	09/25/98
P1.01	revised	05/13/98
P2.07	revised	05/13/98
P3.23	revised	09/25/98
P4.23	revised	09/25/98
P5.23	revised	05/13/98
FP1.01	revised	09/25/98
FP2.07	revised	05/13/98
FP3.23	revised	05/15/98
FP4.23	revised	09/25/98
FP5.23	revised	05/15/98
FP6.23	revised	05/13/98
TC-101	revised	05/13/98
S-1	revised	12/07/98
S-2	revised	12/07/98
S-3	revised	09/25/98
S-4	revised	12/07/98
S-5	revised	12/07/98
038Z001	revised	07/24/98
038L005	revised	05/15/98
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AV-E3	revised	05/04/98
AV-E4	revised	05/04/98
AV-E5	revised	05/04/98
AV-S1	revised	05/04/98
AV-S3	revised	05/04/98
AV-S2	revised	05/04/98
AV-S4	revised	05/04/98
AV-S5	revised	05/04/98
AV-S6	revised	07/24/98
AV-S7	revised	07/24/98
AV-S8	revised	05/04/98
TC-100	revised	05/04/98
TC-101	revised	09/25/98
TC-103	revised	05/04/98
TC-103A	revised	05/04/98
TC-103B	revised	05/04/98

Drawing (cont'd)

FSK-26	revised	11/09/98
FSK-27	revised	11/09/98
FSK-41	dated	11/04/98
FSK-42	dated	11/06/98
FSK-50	dated	11/24/98
SKP-1	revised	11/03/98
SKP-2	revised	11/03/98
S-7.1	dated	09/28/98
S-7.2	dated	09/28/98
S-S.1	dated	10/15/98
S-FS-7	dated	10/15/98
SKS-S-2	dated	10/16/98
22A.1	dated	10/28/98
66	dated	10/28/98
67	dated	10/28/98
S-R.A	dated	10/20/98

MEA 18-92-

CITY OF NEW YORK
DEPARTMENT OF BUILDINGS

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use in accordance with the Report of the Material and Equipment Acceptance (MEA) Division.

Rudolph J. Rinaldi, R.A., Commissioner
MEA 18-92-E
Report of Material and Equipment Acceptance Division

Manufacturer - Dortronics Systems, Inc., 1668 Sag Harbor Turnpike, Sag Harbor, New York 11963.
Trade Name - Dortronics.
Product - Electromagnetic bar magnet type door locks.
Pertinent Code Sections - 27-969; 27-371(j)2; RS 17-3A, 15(a) through (e); RS 17-38(g)(e) and UL 1034.
Laboratory - Underwriters Laboratories Inc.
Test Report - File EX4384, Project 91NK17295, dated November 30, 1991 and File EX4421, Project 91NK28204, dated December 30, 1991.
Description - Electromagnetic bar magnet type door locks connected to a fire alarm system.

Model No.	Description
1106	600 lb. Holding Force
1110	1000 lb. Holding Force
1115	Same as 1110 except employs two half sized armatures rated 500 lb. per leaf. For use on a pair of free swinging doors.
1120	Two 1110 magnets in one housing, rated 1000 lb. per leaf for use on a pair of free swinging doors.

Note: The above are followed by a suffix 12V or 24V indicating 12 Vdc rating or 24 Vdc rating and may have the prefix "TJ" which indicates the employment of a Z-bracket for alternate mounting configurations. The above may have the following options:

Option	Description
L1	One LED pilot light
L2	Two LED pilot light
DPS	Door position sensors
MBS	Magnetic bond sensor (not for use on the model 1106 series)

Electromagnetic releasing devices for the above electromagnetic bar magnets (actuator) consist of he following:

Model	Description
N 5286	Narrow push plate
W 5286	Wide push plate
D 5286	Double push plate (double gang)
5241	Keyswitch

The following describes the type of switch associated with each of the above actuator model suffix:

Suffix	Description
-P14	Toggle type, SpDT button switch
-P15	Mometary action, SPDT button switch
-P23DA	Pneumatic time delay, DPDT button switch
-P24	Toggle type, DPDT button switch
-P25	Momentary action, SPDT button switch

Other releasing devices are as follows:

5216 -MP23/R	Large mushroom actuator
5276 -MP9	Small mushroom switch

The suffixes for the above devices denote the following:

-MP23/R	Momentary mushroom palm switch w/contact block
-MP9	Momentary mushroom pushbutton SPDT
Prefix TJ	For top jamb mount

Plates and Mushroom Caps can be engraved t catalog or customer legend: "EXIT", PUSH TO EXIT", "PUSH TO RELEASE", "PUSH", etc.
5286 Series is also available with conventional Handicap logo engraved on push plate and light blue filled.

Recommendation - That the above electromagnetic Bar Magnet type locks be accepted on condition that all uses locations and installation are in compliance with Sub Chapter 6 and 17 of the Building Code, the applicable Reference Standards and with Electrical Code of the City of New York. All shipments and deliveries of such equipment shall be provided with a metal tag, suitably placed, certifying that the equipment shipped or delivered is equivalent to that tested and acceptable for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance May 7, 1992
Examined by: Mark Jacobs

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
TENANT ALTERATION APPLICATION REVIEW REQUEST

DISTRIBUTION		
No.	To	Facility
4	QAD	5IN
1	D. Warren	PATC Zip43
~~1~~	~~S.F. Chiao~~	~~88S~~
~~1~~	~~C. Daly~~	~~88S~~
~~1~~	~~S. Bates~~	~~2 WTC 37 Fl.~~
~~1~~	~~B. Brown~~	~~88S~~
1	F. DeMartini/Nick Streltz - LERA	2 WTC 37th Fl
~~1~~	~~P. Negron~~	~~2 WTC 29th Fl.~~
~~1~~	~~S. Barbella~~	~~2 WTC 37th Fl.~~

Facility 7 WTC TAA No. 987134 Date 12/11/98

Application/Tenant MAYOR'S OFFICE

Consultant SWANKE HAYDEN

Estimated Cost _____ Submittal No. 5

Description of Work

REPLY TO OUTSTANDING COMMENT
RELOCATION OF FUEL OIL LINE.

Please review the attached revised application and send comments to [redacted]

Name: Jeffrey Gertler

Location: 1 WTC, 88S Phone No. 435-4531
Fax No.: 435-8168

12/18/98
Due Date

DESIGN DISCIPLINES
- [ ] Architectural
- [ ] Egress Analysis
- [ ] Structural
- [ ] HVAC
- [ ] Plumbing
- [ ] Sprinkler
- [ ] Electrical
- [ ] Utility > 600 V
- [ ] Civil
- [ ] Geotechnical
- [ ] Environmental
- [ ] Fueling
- [ ] Radio Freq. Coord.
- [ ] Corrosion Protection
- [ ] Elevator/Escalator
- [ ] Other

ATTACHMENTS
- [ ] Document List
- [ ] Contract Drawings
- [ ] Contract Specifications
- [ ] Tenant Response
- [ ] Computations
- [ ] Reports
- [ ] Catalog Cuts
- [ ] Other

SPECIAL INSTRUCTIONS

DESCRIPTION

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THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV.
DESIGN STANDARDS
DEC 11 1998
IN98-7134 (5)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

Copy to: T. Koebel, J. Napolitano, ~~E. Monteverde~~, ~~J. Richardson~~, ~~N. Ochiga~~, ~~F. Varriano~~

_____(Proj. Mgr.)

_____(Zone Prop. Mgr.)

Jeffrey Gertler
Signature

SWANKE HAYDEN CONNELL ARCHITECTS

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV
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W98-7134
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TENANT CONSTRUCTION REVIEW UNIT

Memorandum

TO: Jeffrey Gertler, PA

FROM: Joseph Aliotta

SUBJECT: Mayor's Office of Emergency Management (MOEM)
"Emergency Operations Center – 7 World Trade Center"
Responses to PA Attachment List of Comments – Submission # 4 – Conditional Approval

SHCA Project No: 5576A

PA TAA # 987134

DATE: December 11, 1998

In response to Port Authority comments submission #4 dated December 3, 1998, the following is the requested written response:

ARCHITECTURAL AND ELECTRICAL

1. Doors 40A and 40B. The response to the previous rider, Comment # 2 is noted, but is not supported by the design that has been submitted to date. The Vikoncs design shows the access control system as the means of releasing the doors, therefore, the access control system, and the electric lock, is directly connected to the fire alarm system. The proposed access control system does not have NYC approval and therefore cannot be accepted. Revise the design of the access control system accordingly. (Modified repeat comment)

Response: See attached schematic diagram and description of push button release devise by Door-O-Tronics Inc. MEA # 18-92-E- . Door # 40A and 40B will be released by push button from receptionist desk as indicated on attached diagram and Vikonics description.

STRUCTURAL

2. Sketches: S-7.1, S-7.2, S-S.1, S-FS.7,SKS-S.2, 22a.1 Sheets 66 and 67, and S-R.A shall be submitted on appropriate signed and sealed contract drawings. See, in general, NYC Building Code Section 27-157.

Response: See attached drawings S-1, S-2, S-4 and S-5.

STRUCTURAL

3. Sketch SKS-S.1 and calculations Sheet 69. Submit shear and bending calculations of the existing beams to verify that they will remain adequate to support the applied loads after the new notch is cut.

Response: See attached drawings and calculations. (Page #'s 77 & 78)

Swanke Hayden Connell Ltd./Swanke Hayden Connell & Partners LLP
295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059

STRUCTURAL

4. The newly submitted sketch 22a.1 indicates that the new fuel tank framing is supported on existing steel beams, whereas the previously submitted drawings and calculations showed that it was supported by the existing concrete slab. Please submit revised calculations and framing details to reflect the changes.

Response: See attached clarification (Page 77)

Swanke Hayden Connell Ltd./Swanke Hayden Connell & Partners LLP
295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059

[redacted]

SWANKE HAYDEN CONNELL ARCHITECTS

OFFICE COPY

Transmittal

Re: Mayor's Office of Emergency Management	Job No. 5576A	Date December 11, 1998
To: Port Authority of New York	Attention: Mr. Jeffrey Gertler	
Address: One World Trade Center New York N.Y. 88TH.. Floor (212) 435-4531		
Copy to: Joseph Aliotta (SHCA)		

PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV.
DESIGN STANDARDS

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(5)

X Prints ☐ Sepia ☐ Shop Drawings X Other
☐ Specifications ☐ Mechanical Art Work ☐ Clears

☐ DHL ☐ Federal Express ☐ Express Mail ☐ U.S. Mail
X Our messenger ☐ Your messenger

No. of Copies	Drawing No.	Title	Dated	Revised
9	SETS	ARCHITECTURAL & ENGINEERING SK'S (SEE ATTACHED DRAWING LIST)		
9	CALCS.	STRUCTURAL CALCULATIONS (SIGNED & SEALED)		DEC..98

Remarks

(3) SETS OF DRAWINGS ARE SIGNED AND SEALED AS PER YOUR REQUEST.

Juan M. Mejia
(212) 219 - 6750

If items listed are not received, please notify : Juan M. Mejia Signature

W:\5576\A\OEMDocs\Transm\PA-12-11-98.doc doc

Swanke Hayden Connell Ltd./Swanke Hayden Connell & Partners LLP
295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059

SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York

SHCA Project No. 5576A
Date: Decenber 11, 1998

LIST OF DRAWINGS

Issued for P. A. Approval

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV.
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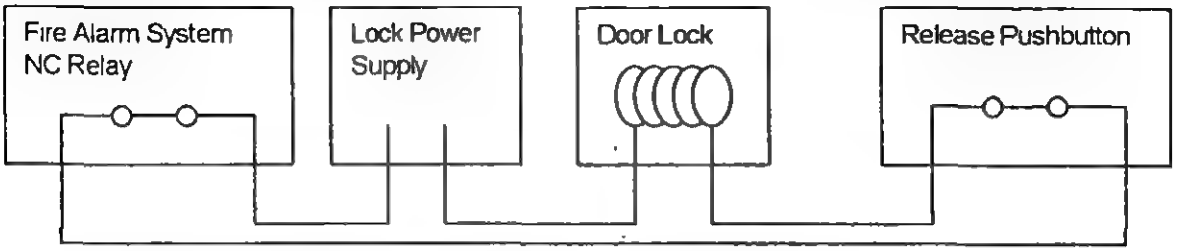
DRAWING NUMBER	DRAWING TITLE	ISSUE DATE
Architectural & Electrical		
FSK-50	ALTERNATE ROUTE FOR OIL PIPES	11/24/98
SEC. 1	SECURITY SK.	12/9/98
Structural		
S-1	FIRST FLOOR FRAMING PLAN	12/8/98
S-2	7TH. FLOOR FRAMING PLAN	12/8/98
S-4	ROOF PART FRAMING PLAN	12/8/98
S-5	SECTIONS	12/8/98
CALCULATIONS		
PAGES 77 & 78	STRUCTURAL CALCULATIONS	Dec-98

December 11, 1998

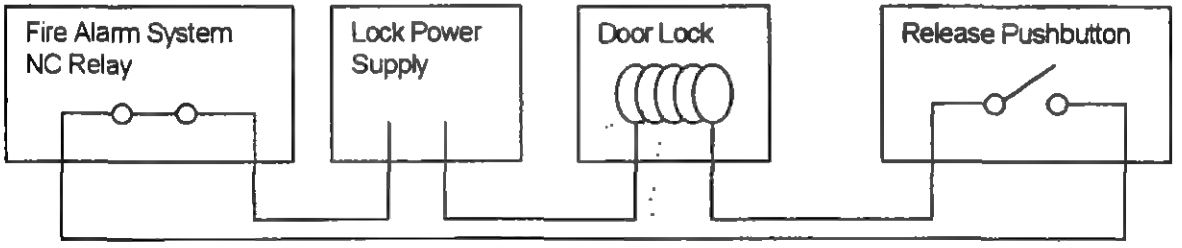
Door Locked under normal conditions

Initally electric power is applied to the door lock thru the fire system controlled relay and the release pushbutton. When power is applied to the lock the door is locked.



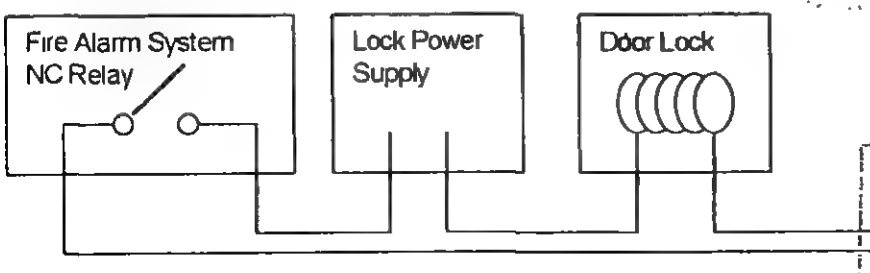
Door Unlocked under normal conditions by Receptionist

The Receptionist disconnects power from the lock by pressing the normally closed release button. When power is removed from the lock the door is released.



Door Unlocked under Fire Alarm conditions

The Fire system relay disconnects power from the lock opening the normally closed contacts. When power is removed from the lock the door is released. Since power cannot be applied to the lock until the fire alarm relay closes it has complete control of the door independent of the Receptionist.



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ENGINEERING DEPT. QUALITY ASSURANCE
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CER 1

DORTRONICS SYSTEMS, INC.

DORTRONICS 1100 Series electromagnetic locking devices, selected options, and a wide range of station controls and exit releases have been examined and tested by Underwriters' Laboratories, Inc., and have been found to comply with the applicable requirements. The specific products and the related UL File numbers are listed below.

All of the products listed have also been approved by New York City Materials and Equipment Acceptance (MEA) Division under MEA-18-92-E.

The following DORTRONICS products are listed under UL File EX4384 (N)

ELECTROMAGNETIC RELEASING DEVICES:

1106/12; 1106/24	Single Locking Devices
1110/12; 1110/24	Single Locking Devices
1115/12; 1115/24	Single devices with Split Armatures for pairs of doors
1120/12; 1120/24	2-Single devices in one housing for pairs of doors

NOTES:

1. Suffixes to model numbers, "/12" and "/24" denote DC operating (input) voltage, which is identifiable by the color leads: 12V – gray leads; 24V – light blue leads.
2. Different housing assemblies to meet mounting or application requirements are identified by one of the following prefixes: "B", "TJ".
3. Operating service options, attached or built-in, include:
   - L1: One attached LED (All models)
   - L2: Two attached LEDs (All models)
   - DPS: Attached SPDT Door Position Switch (All models)
   - MBS: Attached SPDT Magnetic Bond Sensor for 1110 Series only
   - 2MBS: Attached SPDT Magnetic Bond Sensors for 1120 Series only
4. Auxiliary mounting brackets to satisfy door/frame conditions, as required, are identified as 1170, 1180, and 1190 series

The following DORTRONICS products are listed under UL File EX4421, Vol. 1

ACCESSORY ACTUATORS (MANUAL RELEASING DEVICES):

5141-14; -15; -23DA; -24; -25	Mortise cylinder actuated key switches
5216-MR23/R	2-3/8" Dia. Red Mushroom cap palm switches
D5216-MP23/R	Same as 5216 on 2-gang plate
5221 P23DA	Push Button Pneumatic Adjust. delay switches
5276-MP9	1" Dia. Mushroom cap, SPDT mom. push button
N5286-P14; -P15; -P23DA; -P24; -P25	Rectangle push pad on narrow back plate
W5286 Series (as above)	Rectangle push pad on 1-gang back plate
D5286 Series (as above)	Square push pad on 2-gang back plate

OPTIONS:

1. Plates and Mushroom Caps can be engraved to catalog or customer legend; "EXIT", "PUSH TO EXIT", "PUSH TO RELEASE", "RELEASE", "PUSH", etc.
2. 5286 Series is also available with conventional Handicap logo engraved on push pad and contrasting color filled.
3. Suffixes to 4-digit catalog/model numbers indicate switch contact form:
   - -14 SPDT–maintained (alternate action)
   - -15 SPDT–momentary
   - -23DA 1-NO & 1–NC momentary – adj. delay action (return)
   - -24 DPDT–maintained (alternate action)
   - -25 DPDT–momentary

THE CANTOR SEINUK GROUP P.C.
600 MADISON AVENUE • NEW YORK, NEW YORK 10022 • TEL (212) 755-4242 • FAX (212) 752-8924

OEM

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SEVEN WORLD TRADE CENTER
NEW YORK, NY

THE PORT AUTHORITY OF N.Y. & N.J.
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TENANT ALTERATIONS

STRUCTURAL CALCULATIONS
December 1998

PROF. YSRAEL A. SEINUK, P.E., F.A.C.I., CEng. F.I.C.E., *Chief Executive Officer* • IRWIN G. CANTOR, P.E., F.A.C.I., F.A.S.C.E., *President*
SILVIAN MARCUS, P.E., *Executive Vice President* • ESTANISLAO SALCEDO, P.E., *Senior Vice President*
AHMAD RAHIMIAN, P.E., *Vice President* • JEFFREY SMILOW, P.E., *Vice President*

THE CANTOR SEINUK GROUP P.C.
600 MADISON AVENUE • NEW YORK, NEW YORK 10022 • TEL (212) 755-4242 • FAX (212) 752-6924

MEMORANDUM

Date: December 7,1998

Project: OEM
Seven World Trade Center

To: Juan Mejia
Swanke Hayden Connell Arch.

From: Anca Baron

Subject: Response to Port Authority Structural Comments
TAA- W98-7134
Review dated 12-3-98

Structural

Comment:
2) through 4)

Response:
See revised calculation pages 77 and 78 and structural drawings S-1,S-2, S-4 and S-5.

PROF. YSRAEL A. SEINUK, P.E., F.A.C.I., CEng. F.I.C.E., *Chief Executive Officer* • IRWIN G. CANTOR, P.E., F.A.C.I., F.A.S.C.E., *President*
SILVIAN MARCUS, P.E., *Executive Vice President* • ESTANISLAO SALCEDO, P.E., *Senior Vice President*
AHMAD RAHIMIAN, P.E., *Vice President* • JEFFREY SMILOW, P.E., *Vice President*

THE CANTOR SEIN[illegible]GROUP, P.C.
CONSULTING ENGINEERS
600 Madison Avenue
New York, N.Y. 10022
(212) 755-4242 FAX (212) 752-6924

JOB OEM
SHEET NO 77 OF
CALCULATED BY AB DATE 12-7-98
CHECKED BY DATE
SCALE

BEAMS ENCASED IN CONCRETE AT FIRST FLOOR (SKS-S.1 & CALC. SHEET 69) - ARE REQUIRED TO PROVIDE A DIAFRAGM SYSTEM. THEY ARE TAKING ONLY AXIAL FORCE.

PER SKS-FS-7 - SECT. 11 SLAB ISON GRAVEL BACKFILL. FOR REINF. - SEE DWG. S-1

WORST CASE CONDITION IS W14x99 (Σ 160^k)

TOP & BOTT. FLANGES = 80^k

NEW PLATE @ NOTCH IS 1"R x 3'-6" LONG

$$\text{THICK. R.} = \frac{80^k}{42" \times 2} = .95" \quad \therefore \text{ O.K.}$$

T 204.1 (Sample Sheets) 205-1 (Padded)

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JOB OEM
SHEET NO 78 OF
CALCULATED BY AB DATE 12.7.98
CHECKED BY DATE
SCALE

- AREA AT FIRST FLOOR UNDER THE FUEL OIL TANK IS COMPOSED FROM SLAB ON BACKFILL GRAVEL AND STEEL BEAMS ENCASED INTO SLAB, THEREFORE THE CALC. SHEET # 22.a.1 AND 22 ARE CORRECT. (SEE ALSO SECT. 11 ON SKS-FS-7 — NEW DWG. S-5)

- FSK-50

AREA OF CONCRETE ABOVE ENCASED PIPES — BEARING CAP. = .85 × 3.5 × 6' × 24" = 428^k

O.K.

THE PORT AUTHORITY OF NY & NJ

ONE WORLD TRADE CENTER
NEW YORK, NY 10048

(212) 435-7000
(973) 961-6600

THE PORT AUTHORITY OF NY & NJ
QUALITY ASSURANCE DIV
ENGINEERING DEPT.
DEC 8 1998
RECEIVED
NOTED
REFERRED TO: WQ8-7134

December 3,1998

Swanke Hayden Connell Architects
295 Lafayette Street
New York, N.Y. 10012

Subject: 7 WORLD TRADE CENTER – 23rd FLOOR
MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA 987.134
SUBMISSION #4 - CONDITIONAL APPROVAL

Dear Mr. Joseph Aliotta:

This letter responds to your submittal dated November 12, 1998, forwarding for review the documents listed in Attachment A to this letter. Tenant Alteration Application # 987.134 has been approved subject to compliance with the comments listed in Attachment B to this letter.

Incorporate the requirements of the comments into the construction documents, respond to each comment in writing, and submit eight (8) sets of the revised documents by December 15, 1998. The revised documents shall be signed and sealed by the Engineer or Architect-of-record who is licensed to practice in the State of New York. Indicate the latest revision number on each drawing in the title box, circle each revision and indicate the latest revision number inside a triangle. Your co-operation in meeting the submission date for comment resolution will assist in meeting your client's schedule for occupancy.

Any changes to the already approved scope-of-work must be submitted to the Port Authority for review and approval prior to the commencement of associated work. Only contract documents reviewed and approved by this office are to be released in the field for construction.

All correspondence or inquiries should be directed to Jeffrey Gertler, Port Authority, One World Trade Center, 88 South, New York, N.Y. 10048, (212) 435-4531.

Sincerely,

Joseph Napolitano
Supervisor, Tenant Alteration Applications and Base Building Programs
The World Trade Department

cc: Silverstein Properties, Walter Weems

bcc: D. Bergstein, S. Bhol, A. Fadavi, J. Gertler, T. Koebel, R. Lynch, L. Menno, E. Monteverde, S. Murray, J. Napolitano, J. Protas, R. Rafferty, Central File, Chrono File

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #4

Subject to compliance with the requirements listed in this memorandum's rider, the following is a revised list of drawings recommended for approval. All changes from the previous list are shown in **boldface**:

T-1	revised	09/25/98
A-EG-23	revised	09/25/98
A-1-1	revised	09/25/98
A-7-1	revised	07/24/98
A-23-1	revised	09/25/98
A-23-2	revised	07/24/98
A-23-3	revised	09/25/98
A-23-4	revised	09/25/98
A-23-5	revised	05/04/98
A-23-6	revised	05/04/98
A-48-1	revised	05/04/98
D-O	revised	09/25/98
D-1	revised	09/25/98
D-2	revised	07/24/98
D-3	revised	05/04/98
D-4	revised	09/25/98
D-5	revised	05/04/98
D-6	revised	07/24/98
D-7	revised	07/24/98
D-8	revised	05/04/98
D-9	revised	07/24/98
D-10	revised	09/25/98
D-11	revised	07/24/98
D-12	revised	05/04/98
D-13	revised	09/25/98
Workstation Plan	revised	05/04/98
Panel/Energy Plan	revised	05/04/98

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #4

M1.01	revised	09/25/98
M1.07	revised	09/25/98
M1.23	revised	09/25/98
M4.01	revised	09/25/98
E0.01	revised	05/15/98
E1.01	revised	09/25/98
E1.07	revised	07/24/98
E1.48	revised	05/04/98
E6.01	revised	05/04/98
E6.02	revised	05/04/98
E2.23	revised	09/25/98
E3.01	revised	09/25/98
E4.01	revised	09/25/98
E4.02	revised	09/25/98
E4.03	revised	09/25/98
P1.01	revised	05/13/98
P2.07	revised	05/13/98
P3.23	revised	09/25/98
P4.23	revised	09/25/98
P5.23	revised	05/13/98
FP1.01	revised	09/25/98
FP2.07	revised	05/13/98
FP3.23	revised	05/15/98
FP4.23	revised	09/25/98
FP5.23	revised	05/15/98
FP6.23	revised	05/13/98
TC-101	revised	05/13/98
S-1	**revised**	**11/04/98**
S-2	revised	09/25/98
S-3	revised	09/25/98
S-4	revised	09/25/98
S-5	revised	09/25/98
038Z001	revised	07/24/98
038L005	revised	05/15/98
038L002	revised	07/24/98
038L003	revised	07/24/98
H5	dated	03/08/98

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #4

AV-1	revised	05/04/98
AV-2	revised	05/04/98
AV-3	revised	05/04/98
AV-4	revised	05/04/98
AV-EO	revised	05/04/98
AV-E1	revised	07/24/98
AV-E2	revised	05/04/98
AV-E3	revised	05/04/98
AV-E4	revised	05/04/98
AV-E5	revised	05/04/98
AV-S1	revised	05/04/98
AV-S3	revised	05/04/98
AV-S2	revised	05/04/98
AV-S4	revised	05/04/98
AV-S5	revised	05/04/98
AV-S6	revised	07/24/98
AV-S7	revised	07/24/98
AV-S8	revised	05/04/98
TC-100	revised	05/04/98
TC-101	revised	09/25/98
TC-103	revised	05/04/98
TC-103A	revised	05/04/98
TC-103B	revised	05/04/98
FSK-26	**revised**	**11/09/98**
FSK-27	**revised**	**11/09/98**
FSK-41	**dated**	**11/04/98**
FSK-42	**dated**	**11/06/98**
SKP-1	**revised**	**11/03/98**
SKP-2	**revised**	**11/03/98**
S-7.1	**dated**	**09/28/98**
S-7.2	**dated**	**09/28/98**
S-S.1	**dated**	**10/15/98**
S-FS-7	**dated**	**10/15/98**
SKS-S-2	**dated**	**10/16/98**
22A.1	**dated**	**10/28/98**
66	**dated**	**10/28/98**
67	**dated**	**10/28/98**
S-R.A	**dated**	**10/20/98**

12/3/98

ATTACHMENT B – LIST OF COMMENTS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #4

QUALITY ASSURANCE DIVISION COMMENTS

ARCHITECTURAL AND ELECTRICAL

1. Doors 40A and 40B. The response to the previous Rider, Comment 2 is noted, but is not supported by the design that has been submitted to date. The Vikonics design shows the access control system as the means of releasing the doors, therefore, the access control system, and not the electric lock, is directly connected to the fire alarm system. The proposed access control system does not have NYC approval and therefore cannot be accepted. Revise the design of the access control system accordingly. (Modified repeat comment)

STRUCTURAL

2. Sketches S-7.1, S-7.2, S-S.1, S-FS.7, SKS-S.2, 22a.1, Sheets 66 and 67, and S-R.A shall be submitted on appropriate signed and sealed contract drawings. See, in general, NYC Building Code Section 27-157.

3. Sketch SKS-S.1 and Calculation Sheet 69. Submit shear and bending calculations of the existing beams to verify that they will remain adequate to support the applied loads after the new notch is cut.

4. The newly submitted sketch 22a.1 indicates that the new fuel tank framing is supported on existing steel beams, whereas the previously submitted drawings and calculations showed that it was supported by the existing concrete slab. Please submit revised calculations and framing details to reflect the changes.

THE PORT AUTHORITY OF NY & NJ

ONE WORLD TRADE CENTER
NEW YORK, NY 10048

(212) 435-7000
(973) 961-6600

May 20,1998

Swanke Hayden Connell Architects
295 Lafayette Street
New York, N.Y. 10012

Subject: 7 WORLD TRADE CENTER
MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA 987.134
SUBMISSION #2 - CONDITIONAL APPROVAL

Dear Mr. Joseph Aliotta:

This letter responds to your submittal dated May 14, 1998, forwarding for review the documents listed in Attachment A to this letter. Tenant Alteration Application # 987.134 has been approved subject to compliance with the comments listed in Attachment B to this letter.

Incorporate the requirements of the comments into the construction documents, respond to each comment in writing, and submit twelve (12) sets of the revised documents by June 4, 1998. The revised documents shall be signed and sealed by the Engineer or Architect-of-record who is licensed to practice in the State of New York. Indicate the latest revision number on each drawing in the title box, circle each revision and indicate the latest revision number inside a triangle. Your co-operation in meeting the submission date for comment resolution will assist in meeting your client's schedule for occupancy.

The certifying Licensed Professional and Contractor referred to in Rider "C" shall contact Mr. Joseph Napolitano at (212)435-7285, 72 hours prior to the start of construction for a pre-construction meeting to discuss work scheduling and compliance with specific Port Authority requirements pertaining to construction work that will be performed on the premises.

Any changes to the already approved scope-of-work must be submitted to the Port Authority for review and approval prior to the commencement of associated work. Only contract documents reviewed and approved by this office are to be released in the field for construction.

All correspondence or inquiries should be directed to Jeffrey Gertler, Port Authority, One World Trade Center, 88 South, New York, N.Y. 10048, (212) 435-4531.

Sincerely,

Gerard Gaeta
Supervisor of Tenant and Landlord Projects
The World Trade Department

cc: Silverstein Properties, Walter Weems

THE PORT AUTHORITY OF NY & NJ
QUALITY ASSURANCE DIV.
ENGINEERING DEPT.
2 2 1998
RECEIVED RTP
NOTED
REFERRED TO W98-7134

bcc: D. Bergstein, E. Daly, G. Donohue, A.Fadavi, J. Gertler, T. Koebel, E. Monteverde, J. Napolitano, T. O'Connor, R. Pisapia, J. Protas, N. Seliga, Central File, Chrono File

ATTACHMENT A - LIST OF DOCUMENTS
7 WTC - MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA 987134
SUBMISSION # 2

Drawing		
T-1	revised	5/13/98
A-EG-23	revised	5/13/98
A-1-1	revised	5/13/98
A-7-1	revised	5/04/98
A-23-1	revised	5/04/98
A-23-2	revised	5/04/98
A-23-3	revised	5/04/98
A-23-4	revised	5/04/98
A-23-5	revised	5/04/98
A-23-6	revised	5/04/98
A-48-1	revised	5/04/98
D-0	revised	5/04/98
D-1	revised	5/04/98
D-2	revised	5/04/98
D-3	revised	5/04/98
D-4	revised	5/04/98
D-5	revised	5/04/98
D-6	revised	5/04/98
D-7	revised	5/04/98
D-8	revised	5/04/98
D-9	revised	5/04/98
D-10	revised	5/13/98
D-11	revised	5/04/98
D-12	revised	5/04/98
M1.01	revised	5/13/98
M1.07	revised	5/13/98
M1.23	revised	5/13/98
M4.01	revised	5/13/98

ATTACHMENT A - LIST OF DOCUMENTS
7 WTC - MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA 987134
SUBMISSION # 2

E1.01	revised	5/13/98
E1.23	revised	5/13/98
E3.01	revised	5/13/98
E4.01	revised	5/13/98
E4.02	revised	5/13/98
E4.03	revised	5/13/98
P1.01	revised	5/13/98
P2.07	revised	5/13/98
P3.23	revised	5/13/98
P4.23	revised	5/13/98
P5.23	revised	5/13/98
FP1.01	revised	5/13/98
FP2.07	revised	5/13/98
FP3.23	revised	5/13/98
FP4.23	revised	5/13/98
FP5.23	revised	5/13/98
FP6.23	revised	5/13/98
TC-101	revised	5/13/98
S-1	revised	5/13/98
S-2	revised	5/13/98
S-3	revised	5/13/98
S-4	revised	5/13/98
S-5	revised	5/13/98
038Z001	revised	5/13/98
038L005	revised	5/13/98
038L002	revised	5/13/98
038L003	revised	5/13/98

052098

ATTACHMENT B - LIST OF COMMENTS
7 WTC - MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA 987134
SUBMISSION # 2

ARCHITECTURAL

1.(Q) Drawings A-1-1 and D-10. Please verify with an assembly number (for 4-hour rated) for the 6" thick concrete block curb at the rated hatch on the two open sides.

2.(Q) Drawings A-23-1 and A-23-5:

a) Indicate 3/4 hour rating for Doors 55 and 56 in the one-hour rated wall.

b) Doors 3, 9, 11A, 11B, 14, 35, 38, 42A, 42C, 44, 45, etc., occur in two-hour rated walls. These doors are not rated and will not maintain the integrity of the fire partitions. Please provide rated doors as required.

3.(Q) Drawing D-1. The response to Comment 8 of the previous Rider has been noted. Please provide clear maneuvering space of 5' radius, not overlapping the space from the door swing opening. See ADA Section 4.2.3. (Modified repeat comment)

4.(Q) Drawing D-0, Card Reader. Submit BS&A or MEA resolution of approval for all card reader devices and locking devices to be installed in all exit doors. See NYCBC Section 27-131. (Repeat comment)

5.(Q) Drawings A-1-1 and D-4, Elevation 'C' and 'F'. Please indicate the Glass marking (with height A.F.F) on the glass panel in the elevation, in compliance with BS&A Calendar #501-68-SR.

ARCHITECTURAL AND ELECTRICAL

6.(Q) Electrically and electromagnetically locked doors in the path of egress, such as on Vikonics Drawings 038Z001 and 038L003, Doors 40A, 40B, 21C, 05 and 13. The 5/13/98 Swanke Hayden Connell response to the previous Rider, Comment 9 is noted:

a) The cited exception to Code Section 27-371(j)(1)a, for secure areas, applies only if specifically approved on a reconsideration basis. Submit a request for reconsideration for those areas for which the exception will apply.

b) The release means for the magnetic locks shall be directly on the door, and shall interrupt the magnetic lock circuit directly, without reliance upon a computer or other unapproved control system. An interposing relay that has been approved for the purpose may be used in the lock circuit, and may be required if the switch contacts are not rated to interrupt the magnetic lock circuit current. The response, that there is a tie-in to the fire alarm system, does not address the problem.

c) The response notes that the access control system does not have a BS&A or MEA approval. Therefore, this system cannot be approved. Revise the design accordingly.

d) Submit the actual BS&A approval resolutions that are cited in the response.

(Modified repeat comment)

ELECTRICAL

7.(Q) Grounding Conductor Sizes, Specification Pages 16400-29 and 16400-33. Add that the minimum size of grounding conductors shall be as listed in NYC Electrical Code Section 27-3110, Table 1. The response to previous Rider, Comment 12 is noted. However, the revised specifications have not be submitted. (Repeat comment)

ATTACHMENT B - LIST OF COMMENTS
7 WTC - MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA 987134
SUBMISSION # 2

8.Q) Drawing TC-101; Scope of Work, Telecommunications Cable Installation, Specification Section 16700B, page 4. Revise so that the communications cable is installed elsewhere than in an electric closet. See NYC Electrical Code Bulletin 119-1970, Section 119.1-b. The response to previous Rider, Comment 13 is noted. However, the revised drawings and specifications continue to show the communications installation in an electric closet. (Repeat comment)

9.(Q) Drawings E3.01 and E4.03, regarding system grounding for the UPS and transformer secondary windings. The response to the previous Rider, Comment 16 is noted. However, the details on Drawing E4.03, requiring sizing "per NYC Electrical Code," are not sufficient. Submit the actual conductor sizes. See NYC Electrical Code Sections 27-3105-b.3 and 27-3110, Table 1. (Modified repeat comment)

MECHANICAL

10.(Q) Drawing M1.01, Fuel Piping Schematic. Revise the note to require that the conduit enclosing the fuel oil piping (in the floor trench) shall be 10 gauge steel, two sizes larger than the fuel pipe in it, as required by Code Section 27-829(f)92). (Repeat cement)

11.(Q) Drawings M1.01 and M1.07. Clarify whether the existing risers being utilized for the new fuel oil lines is schedule 40 seamless steel and enclosed exclusively, containing no other pipes or ducts, in a shaft constructed of 4-inch concrete or masonry. The shaft shall be provided with a drainpipe at its base that leads to an open sight drain or open sump. See Code Section 27-829(f). Submit the appropriate documentation. (Repeat comment)

12.(Q) Drawing M1.07. Discharge plenum and/or opening for the internal combustion engines exhaust creates a fire hazard conditions in conjunction with the location of the fuel oil vent. Relocate the fuel oil vent outside of the engine exhaust plenum. (Repeat comment)

13.(Q) Drawing M1.23. Provide index for ventilation for each room or space as required by the Code, Section 27-182(a)(3). Expand the ventilation schedule to include each occupiable room or space as required by the Code. (Repeat comment)

14.(Q) Drawing M1.23. Show all the fire dampers, smoke dampers or combination fire/smoke dampers, existing or new, in the ducts that penetrate the new fire rated construction as required by the Code, RS 13-1, Section 3-3.7.2 and the NYC Department of Buildings, Technical Policy and Procedure Notice #6/96. See Drawing A-23-1 for location of all fire rated walls. (Repeat comment)

STRUCTURAL

Comments 30, 32-(a), and 34 of the previous Rider are repeated since no information requested in the original comment was provided:

15.(Q) The locations and loads of each piece of machinery and equipment having a weight in excess of one thousand pounds shall be noted on the drawings. Code Section 27-157(b)(3). (Repeat comment)

16.(Q) Drawing A-1.1, Trench Note on the Plan and Detail 2. Verify with calculations that the existing construction will not be overstressed due to the new trench cut in the existing slab. (Repeat comment)

17.(Q) Drawing A-23-1. Submit calculations to show that the existing construction is not overstressed under the added loads in the new Storage Room 23-24, Libraries 23-28 and 23-18, File Room 23-20, and Vault Room 23-16. (Repeat comment)

ATTACHMENT B - LIST OF COMMENTS
7 WTC - MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA 987134
SUBMISSION # 2

18.(Q) Please submit the following:

a) 23rd Floor. Verify that the existing construction is not overstressed under the added weight of operable partitions when they are extended and are retracted in Conference Rooms 23-44 through 23-46.

b) Submit design of the new Radio Room construction on the existing roof. Also, please verify that the existing roof can support Radio Room loads and snow drifting created by it.

c) Verify with calculations the design of the new Antenna Support to the existing roof.

19. Structural Calculations dated May, 1998:

a) Fuel Tank Framing. Add weight of masonry walls supported on the Mezzanine.

b) Calculations of the 23rd Floor Construction:

i) The existing slab design of LAN Room is noted. Submit also the design of the existing framing at this location.

ii) Submit calculations to verify the adequacy of the floor in the Water Storage Room for 10 feet high stack of bottles, as per note on Drawing S-3.

ATTACHMENT B - LIST OF COMMENTS
7 WTC - MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA 987134
SUBMISSION # 2

FIRE PROTECTION

20.(Q) Drawing FP4.23, Pre-action Sprinkler System Description and Sequence of Operations (Items 2.B and 3), Pre-action System Assembly Detail, and Pre-action Fire Sprinkler Electrical Control One-Line Rider Diagram. The NYC Fire Department prohibits cross zoning of detectors in preaction systems except where a halon system is also protecting an area identical to that protected by the sprinkler. Revise accordingly.

Also, revise Note 2(b) under the Pre-action Sprinkler System Description and Sequence of Operation to eliminate cross-zoning of detectors as required by NYC Fire Department.

21.(Q) Drawing FP1-01. Sprinkler piping and heads on the first floor under Fuel Tank Storage Room are noted to be installed tight to the wall. Distance form walls to sprinkler shall conform to NFPA #13 4-2.1.5.1 and 4-2.1.5.2.

PLUMBING

22.(Q) Drawing P3.23. Provide a drain receptor for the Pre-action valve and assembly as noted on the Pre-action system detail shown on Drawing FP4.23.

GENERAL COMMENT

Per SHCA the area under the fuel storage tank should not be used for charging storage batteries. Provide signage giving such notice.

052098

W98-7134

TO: SAROJ BHOL
FROM: JEFFREY GERTLER
DATE: NOVEMBER 25, 1998
SUBJECT: MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
7 WORLD TRADE CENTER
TAA 987134

Please see attached request from the Architect for a meeting with your staff to discuss a problem they are having. Please let me know when it will be convenient for you.

I can be reached on ext. 4531.

Thank You

Spoke to J. Gertler.
Re: 1. Rerouting of fuel oil lines as per sketch is O.K.
2. Please note that the 2 - access doors to the elevator pits are not blocked.

11/30/98

SWANKE HAYDEN CONNELL ARCHITECTS

Fax Message

To: Mr. Jeffrey Gertler
Port Authority of New York

From: Juan M. Mejia

Fax: (212) 435-8168

Job: 5576A

Date: November 24, 1998 **Pages:** 2

Message:

Re: Mayor's Office of Emergency Management
7 World Trade Center

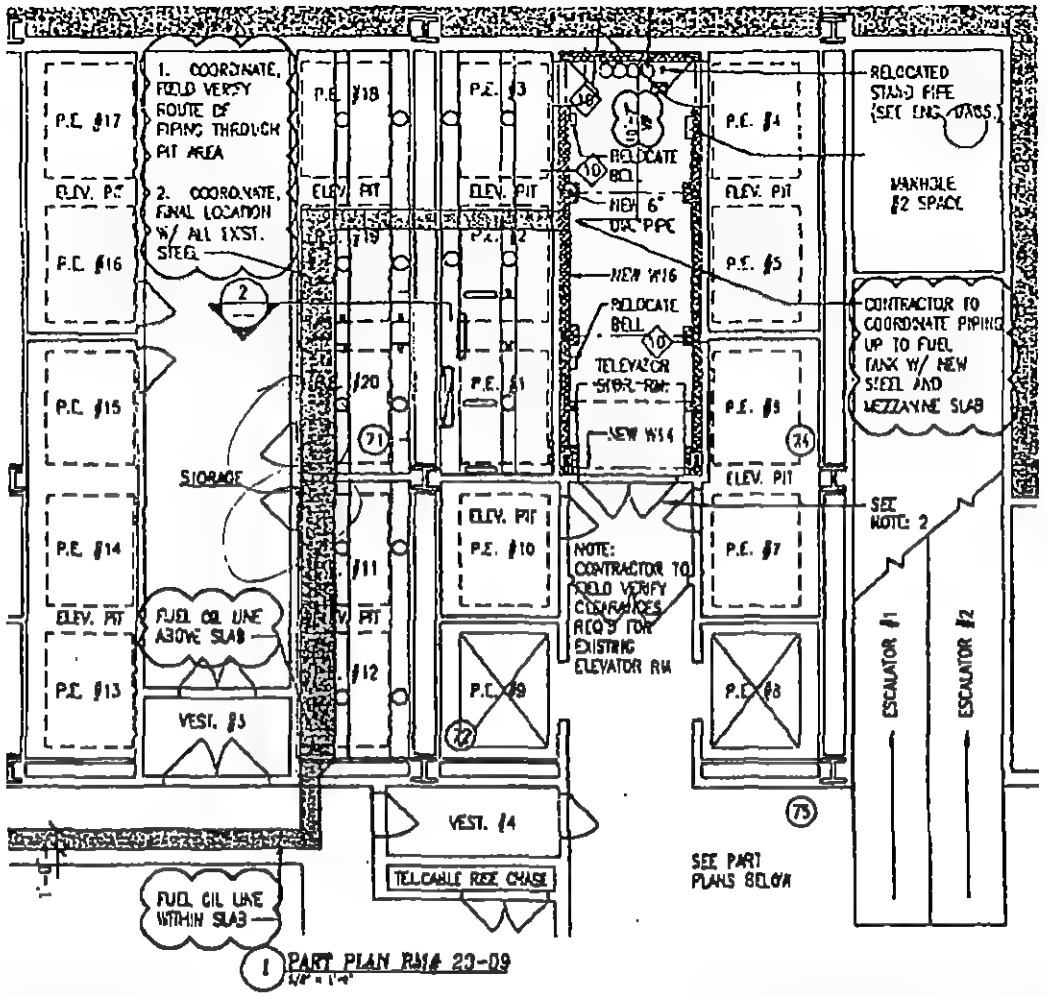
As per your conversation with Joe Aliotta last week, we are requesting a meeting with your office next week to discuss attached FSK-50 for the alternate route of the fuel oil piping in the ground floor for OEM.
Attached please find FSK-50 for your review.

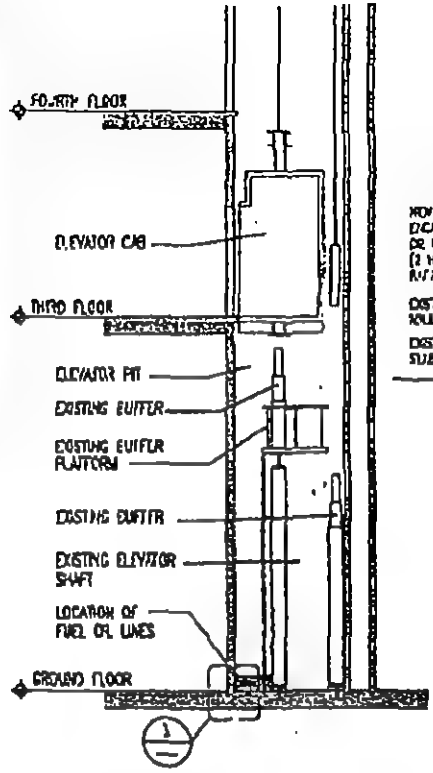
Chi Chu-Silverstein Properties, Inc.
Walter Weems III -Silverstein Properties, Inc.
Joseph Aliotta-SHCA

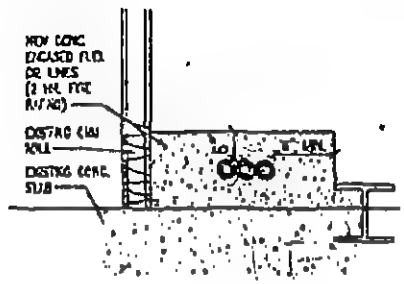
\\NEWYORK04\PROJECT\5576\A\OEM\Docs\Fax\PA-Fuel Oil PIPING 11-24-98.doc

Swanke Hayden Connell Ltd./Swanke Hayden Connell & Partners LLP
295 Lafayette Street, New York, New York 10012
212 226 9096, Fax 212 219 0059

SWANKE HAYDEN CONNELL ARCHITECTS







2 SCHEMATIC SECTION

No. Date Revisions	Job Title/Drawing Title: MAYORS OFFICE OF EMERGENCY MANAGEMENT — ALT. ROUTE FOR OIL PIPES	Scale: AS NOTED. PSK-50
	Swanke Hayden Connell Ltd 205 Lafayette St., New York, New York 10013 212 226 0499, Fax 212 219 0025	Date: 11/24/98 Job No. 9578A

sign, Fabrication, and Erection of Structural Steel for Buildings;

(b) Reinforced Concrete. Building Code Requirements for Reinforced Concrete: ANSI/ACI 318.

Where stresses due to loads, other than elevator loads supported on the beams or floor, exceed those due to the elevator loads, 100% of the permitted stresses may be used.

Rule 105.5 Allowable Deflections of Machinery and Sheave Beams and Their Supports

The allowable deflections of machinery and sheave beams and their immediate supports under static load shall not exceed $\frac{1}{1000}$ of the span.

Elevator Code RS 18-1

SECTION 106
PITS

Rule 106.1 Pits

106.1a Where Required. A pit shall be provided for every elevator.

106.1b Design and Construction of Pits

(1) The construction of the pit walls, the pit floor, and any pit access doors (see Rule 106.1d) shall conform to Rules 100.1 and 100.2.

[ED] *(2)* The floor of the pit shall be approximately level, except that:

(a) trenches or depressions may be provided for the installation of buffers, compensating sheaves and frames, and vertically sliding biparting hoistway doors where structural conditions make such trenches or depressions necessary;

(b) In existing buildings, where new elevators are installed or existing elevators are altered, existing foundation footings extending above the general level of the pit floor may remain in place, provided the maximum encroachment of such footings does not exceed 15% of the cubic content of the pit and further provided that it is impracticable to remove the footing.

[ED] *(3)* Drains connected directly to sewers shall not be installed in elevator pits. Sumps with or without pumps may be installed.

[85a] *(4)* Sumps in pits, where provided, shall be covered. The cover shall be level with the pit floor.

[ED] **106.1c Guards Between Adjacent Pits**

(1) Where there is a difference in level between the floors of adjacent pits of more than 2 ft (610 mm), a metal guard unperforated, or perforated with openings which will reject a ball 2 in. (51 mm) in diameter, shall be installed for separating such pits. Guards shall extend not less than 6 ft (1829 mm) above the level of the higher pit floor and may be provided with a self-closing access door.

(2) Where the difference in level is 2 ft (610 mm) or less, a metal railing not less than 42 in. (1067 mm) high measured from the level of the higher pit floor may be installed in lieu of the guard.

106.1d Access to Pits. Safe and convenient access shall be provided to all pits, and shall conform to the following.

(1) Access shall be by means of the lowest hoistway door or by means of a separate pit access door.

(2) There shall be installed in the pit of each elevator where the pit extends more than 3 ft (914 mm) below the sill of the pit access door, a fixed vertical ladder of noncombustible material, located within reach of the access door. The ladder shall extend not less than 42 in. (1067 mm) above the sill of the access door, or handgrips shall be provided to the same height.

(3) Pits shall be accessible only to authorized persons.

(4) Where a separate pit access door is provided, it shall be self-closing and provided with a spring-type lock arranged to permit the door to be opened from inside the pit without a key. Such doors shall be kept locked.

(5) If the door swings into the pit, it shall be located so that it does not interfere with moving equipment. [85a]

(6) The door shall have a minimum width of 30 in. (762 mm) and a minimum height of 6 ft (1829 mm).

106.1e Illumination of Pits. A permanent lighting fixture shall be provided in all pits, which shall provide an illumination of not less than 5 footcandles (54 lux) at the pit floor. A light switch shall be provided and shall be so located as to be accessible *from the pit access door.*

106.1f Stop Switch in Pits. There shall be installed in the pit of each elevator an enclosed stop switch or switches meeting the requirements of Rule 210.2(g).

This switch shall be so located as to be accessible from the pit access door. Where access to the pits of elevators in a multiple hoistway is by means of a single access door, the stop switch for each elevator shall be located adjacent to the nearest point of access to its pit from the access door.

In elevators where access to the pit is through the lowest landing hoistway door, a stop switch shall be located approximately 18 in. (457 mm) above the floor level of the landing, within reach from this access floor and adjacent to the pit ladder if provided. When the pit exceeds 6 ft 7 in. (2007 mm) in depth, an additional stop switch is required adjacent to the

pit ladder and approximately 4 ft (1219 mm) above the pit floor. Where more than one switch is provided, they shall be wired in series.

106.1g Minimum Pit Depths Required. The pit depth shall be not less than is required for the installation of the buffers, compensating sheaves if any, and all other elevator equipment located therein, and to provide the minimum bottom car clearance and runby required by Rule 107.1.

SECTION 107
BOTTOM AND TOP CLEARANCES AND RUNBYS FOR ELEVATOR CARS AND COUNTERWEIGHTS

Rule 107.1 Clearances

107.1a Bottom Car Clearances. When the car rests on its fully compressed buffer, there shall be a vertical clearance of not less than 2 ft (610 mm) between the pit floor and the lowest structural or mechanical part, equipment, or device installed beneath the car platform except guide shoes or rollers, safety-jaw assemblies, and platform aprons, guards, or other equipment located within 12 in. (305 mm) horizontally from the sides of the car platform.

Trenches and depressions or foundation encroachments permitted by the exceptions in Rule 106.1b shall not be considered in determining this clearance.

When the car rests on its fully compressed buffer, no part of the car or any equipment attached thereto shall strike any part of the pit or any part of the equipment located therein.

107.1b Bottom Runby for Counterweighted Elevators. The bottom runby of cars and counterweights shall be not less than the following.

[ED] *(1)* Where oil buffers are used, 6 in. (152 mm), except that:

(a) where practical difficulties prevent a sufficient pit depth or where a top clearance cannot be provided to obtain the runby specified, it may be reduced;

(b) where spring-return type oil buffers are used, the runby may be eliminated so that the buffers are compressed by amounts not exceeding those permitted by Rule 201.4h, when the car floor is level with the terminal landings.

[87] *(2)* Where spring buffers are used, 6 in. (152 mm), except for rheostatic and single-speed AC control, not less than as shown in Table 107.1b.

TABLE 107.1b [87]
MINIMUM BOTTOM RUNBY FOR COUNTERWEIGHTED ELEVATORS WITH SPRING BUFFERS AND RHEOSTATIC CONTROL OR SINGLE-SPEED AC CONTROL

Rated Speed, ft/min	Runby, In.
Not over 25	3
Over 25 to 50	6
Over 50 to 100	9
Over 100 to 200	12

GENERAL NOTE:
1 ft/min = 5.08 E − 03 m/s
1 in. = 25.4 mm

107.1c Bottom Runby for Uncounterweighted Elevators. The bottom runby of uncounterweighted elevators shall be not less than the following:

(1) 3 in. (76 mm) where the rated speed does not exceed 25 ft/min (0.13 m/s);

(2) 6 in. (152 mm) where the rated speed exceeds 25 ft/min (0.13 m/s).

107.1d Maximum Bottom Runby. In no case shall the maximum bottom runby exceed the following:

(1) 24 in. (610 mm) for cars;

(2) 36 in. (914 mm) for counterweights.

107.1e Top Car Clearances for Counterweighted Elevators. [ED] The top car clearance shall be not less than the sum of the following items:

(1) the bottom counterweight runby (see Rule 107.1b);

(2) the stroke of the counterweight buffer used, or the remaining stroke when the buffer is compressed with the car at the top terminal landing (see Rules 107.1b and 201.4h);

(3) 2 ft (610 mm) or the distance which any sheave or any other equipment mounted in or on the car crosshead projects above the top of the car crosshead, whichever is greater, but in no case shall there be less than 6 in. (152 mm) clearance above the equipment exclusive of guide shoe assemblies or gate posts for vertical sliding gates, mounted on the car top or in or on the car crosshead when the car has reached its maximum upward movement.

(4) Where an oil buffer is used for the counterweight and no provision is made to prevent the jump of the car upon counterweight buffer engagement, add:

(a) one-half the gravity stopping distance (see Section 1304) based on 115% of the rated speed; or

(b) one-half the counterweight buffer stroke if a reduced stroke buffer conforming to Rule 201.4a(2) is used.

(5) Where counterweight spring buffers are used,

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

M E M O R A N D U M

To: Ms. Teresa Koebel, Manager, World Trade Project Management
From: C. John Lin, P.E.
Date: November 30, 1998
Subject: **WTC - ALTERATION APPLICATION W98-7134 - 7 WTC - MAYOR'S EMERGENCY MANAGEMENT OFFICE**

Reference: Review Request dated 11/5/98

Copy To:
J. Castaldo
A. Fadavi
M. Finegold
L. Menno
J. Napolitano
K. Piatt
R. Rafferty
Job Folder
Chrono Folder

A review of the material submitted with the referenced request has been made.

The previous recommendation of approval to proceed with construction remains **unchanged subject** to the submission of the items listed below being revised in accordance with the **four (4) requirements** listed on the attached rider.

Drawings: Calculations:

REMARKS: 1) See the attachment for a revised list of drawings recommended for approval.

2) This memorandum was transmitted to the Facility via OA on November 30, 1998.

C. John Lin, P.E.
Manager
Quality Assurance Division

I.D.: W98-7134-004
MP/al
Att.

Reviewers:
M. Palmieri, Coordinator & Architectural; A. Rohssler, Electrical;
O.M. Clemente, Mechanical; H. MacDonald, Plumbing; V. Tsin, Structural;
D. Luey, Fire Protection.

RIDER

ALTERATION APPLICATION W-987134

ARCHITECTURAL AND ELECTRICAL

1. Doors 40A and 40B. The response to the previous Rider, Comment 2 is noted, but is not supported by the design that has been submitted to date. The Vikonics design shows the access control system as the means of releasing the doors, therefore, the access control system, and not the electric lock, is directly connected to the fire alarm system. The proposed access control system does not have NYC approval and therefore cannot be accepted. Revise the design of the access control system accordingly. (Modified repeat comment)

STRUCTURAL

2. Sketches S-7.1, S-7.2, S-S.1, S-FS.7, SKS-S.2, 22a.1, Sheets 66 and 67, and S-R.A shall be submitted on appropriate signed and sealed contract drawings. See, in general, NYC Building Code Section 27-157.

3. Sketch SKS-S.1 and Calculation Sheet 69. Submit shear and bending calculations of the existing beams to verify that they will remain adequate to support the applied loads after the new notch is cut.

4. The newly submitted sketch 22a.1 indicates that the new fuel tank framing is supported on existing steel beams, whereas the previously submitted drawings and calculations showed that it was supported by the existing concrete slab. Please submit revised calculations and framing details to reflect the changes.

ATTACHMENT

ALTERATION APPLICATION W-987134

Subject to compliance with the requirements listed in this memorandum's rider, the following is a revised list of drawings recommended for approval. All changes from the previous list are shown in **boldface**:

Drawing		
T-1	revised	09/25/98
A-EG-23	revised	09/25/98
A-1-1	revised	09/25/98
A-7-1	revised	07/24/98
A-23-1	revised	09/25/98
A-23-2	revised	07/24/98
A-23-3	revised	09/25/98
A-23-4	revised	09/25/98
A-23-5	revised	05/04/98
A-23-6	revised	05/04/98
A-48-1	revised	05/04/98
D-0	revised	09/25/98
D-1	revised	09/25/98
D-2	revised	07/24/98
D-3	revised	05/04/98
D-4	revised	09/25/98
D-5	revised	05/04/98
D-6	revised	07/24/98
D-7	revised	07/24/98
D-8	revised	05/04/98
D-9	revised	07/24/98
D-10	revised	09/25/98
D-11	revised	07/24/98
D-12	revised	05/04/98
D-13	revised	09/25/98
Workstation Plan	revised	05/04/98
Panel/Energy Plan	revised	05/04/98
M1.01	revised	09/25/98
M1.07	revised	09/25/98
M1.23	revised	09/25/98
M4.01	revised	09/25/98
E0.01	revised	05/15/98
E1.01	revised	09/25/98
E1.07	revised	07/24/98
E1.48	revised	05/04/98
E6.01	revised	05/04/98
E6.02	revised	05/04/98
E2.23	revised	09/25/98
E3.01	revised	09/25/98
E4.01	revised	09/25/98

Drawing (cont'd)

E4.02	revised	09/25/98
E4.03	revised	09/25/98
P1.01	revised	05/13/98
P2.07	revised	05/13/98
P3.23	revised	09/25/98
P4.23	revised	09/25/98
P5.23	revised	05/13/98
FP1.01	revised	09/25/98
FP2.07	revised	05/13/98
FP3.23	revised	05/15/98
FP4.23	revised	09/25/98
FP5.23	revised	05/15/98
FP6.23	revised	05/13/98
TC-101	revised	05/13/98
S-1	**revised**	**11/04/98**
S-2	revised	09/25/98
S-3	revised	09/25/98
S-4	revised	09/25/98
S-5	revised	09/25/98
038Z001	revised	07/24/98
038L005	revised	05/15/98
038L002	revised	07/24/98
038L003	revised	07/24/98
H5	dated	03/08/98
AV-1	revised	05/04/98
AV-2	revised	05/04/98
AV-3	revised	05/04/98
AV-4	revised	05/04/98
AV-EO	revised	05/04/98
AV-E1	revised	07/24/98
AV-E2	revised	05/04/98
AV-E3	revised	05/04/98
AV-E4	revised	05/04/98
AV-E5	revised	05/04/98
AV-S1	revised	05/04/98
AV-S3	revised	05/04/98
AV-S2	revised	05/04/98
AV-S4	revised	05/04/98
AV-S5	revised	05/04/98
AV-S6	revised	07/24/98
AV-S7	revised	07/24/98
AV-S8	revised	05/04/98
TC-100	revised	05/04/98
TC-101	revised	09/25/98
TC-103	revised	05/04/98
TC-103A	revised	05/04/98
TC-103B	revised	05/04/98

Drawing (cont'd)

FSK-26	revised	11/09/98
FSK-27	revised	11/09/98
FSK-41	dated	11/04/98
FSK-42	dated	11/06/98
SKP-1	revised	11/03/98
SKP-2	revised	11/03/98
S-7.1	dated	09/28/98
S-7.2	dated	09/28/98
S-S.1	dated	10/15/98
S-FS-7	dated	10/15/98
SKS-S-2	dated	10/16/98
22A.1	dated	10/28/98
66	dated	10/28/98
67	dated	10/28/98
S-R.A	dated	10/20/98

SWANKE HAYDEN CONNELL ARCHITECT

Transmittal

W98-7134

Re: Mayor's Office of Emergency Management
Job No.: 5576A
Date: November 12, 1998

To: Port Authority of New York
Attention: Mr. Jeffrey Gertler

Address: One World Trade Center New York N.Y. 88TH.. Floor (212) 435-4531

Copy to: Joseph Aliotta (SHCA)

X Prints ☐ Sepia ☐ Shop Drawings X Other
☐ Specifications ☐ Mechanical Art Work ☐ Clears
☐ DHL ☐ Federal Express ☐ Express Mail ☐ U.S. Mail
X Our messenger ☐ Your messenger

No. of Copies	Drawing No.	Title	Dated	Revised
10	SETS	ARCHITECTURAL & ENGINEERING SK'S (SEE ATTACHED DRAWING LIST)		
10	S-1	1ST. FLOOR FRAMING PLAN		11/4/98
10	CALCS.	STRUCTURAL CALCULATIONS (SIGNED & SEALED)		OCT.98

OFFICE COPY

Remarks

(3) SETS OF DRAWINGS ARE SIGNED AND SEALED AS PER YOUR REQUEST.

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING / QUALITY ASSURANCE DIV.
DESIGN STANDARDS
NOV 13 1998
W98-7134 (4)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

Juan M. Mejia
(212) 219 - 6750

If items listed are not received, please notify : Juan M. Mejia Signature

W:\5576\A\OEMDocs\Transm\PA-11-12 98.doc doc

Swanke Hayden Connell Ltd./Swanke Hayden Connell & Partners LLP
295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059

[redacted]ANKE HAYDEN CONNELL ARCHITE

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
7 World Trade Center
New York, New York

SHCA Project No. 5576A
Date: November 12, 1998

LIST OF DRAWINGS
Issued for P. A. Approval

RAWING NUMBER	DRAWING TITLE	ISSUE DATE
rchitectural		
SK-26	PART PLAN & ELEVATION @ PENTHOUSE	11/9/98
SK-27	PIPE & CATWALK SUPPORT @ DISHES	11/9/98
SK-41	OIL LEAK DETECTION BASIN @ 1ST. FLOOR	11/4/98
SK-42	REVISED DETAIL 10 FROM SHEET D-6	11/6/98
ire Protection		
KP-1	SPRINKLER PLAN @ FUEL OIL TANK LEVEL	11/3/98
KP-2	SPRINKLER PLAN @ TELEVATOR STORAGE LEVEL	11/3/98
tructural		
iK S-7.1	7TH. FLOOR NEW STEEL SUPPORT FOR WATER TANK	9/28/98
iK S-7.2	7TH. FLOOR CONCRETE PAD @ SWITCHGEAR	9/28/98
iK S-S1	FIRST FLOOR BEAM PENETRATIONS	10/15/98
K S-FS-7	SECTION @ FIRST FLOOR TRENCH AREA	10/15/98
K S-S2	NOTVH @ EXISTING BEAMS @ FIRST FLOOR	10/16/98
K 22.a 1	FUEL OIL TANK AREA	10/28/98
3	7TH. FLOOR OPENING @ EXISTING BEAM	10/28/98
7	7TH. FLOOR OPENING @ EXISTING BEAM	10/28/98
K S-RA	ROOF ANTENA SUPPORT	10/20/98
-1	1ST FLOOR FARMING PLAN	11/4/98
ALCULATIONS		
5 PAGES	STRUCTURAL CALCULATIONS	Oct-98

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THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. OF [illegible]
DESIGN STANDARDS
NOV 13 1998
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RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

SWANKE HAYDEN CONNELL ARCHITECTS

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV.
DESIGN STANDARDS
NOV 13 1998
W98-7134
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

Memorandum

TO: Jeffrey Gertler, PA

FROM: Joseph Aliotta

SUBJECT: Mayor's Office of Emergency Management (MOEM)
"Emergency Operations Center – 7 World Trade Center"
Responses to PA Attachment List of Comments – Submission # 3 – Conditional Approval

SHCA Project No: 5576A

PA TAA # 987.134

DATE: November 12, 1998

In response to Port Authority comments submission #3 dated October 16, 1998, the following is the requested written response:

ARCHITECTURAL

1. Drawing A-23-1 and A-23-5. The response to comment 2.b of the previous rider is noted; however, Door 3 is in a two-hour rated wall. The door is not rated and will not maintain the integrity of the fire partition. Please provide a fire rated door as required. (Modified repeat comment)

Response: Door #3 is not required to be fire rated see details 12 & 13 drawing D-13 this is not a fire rated wall therefore a labeled door is not required.

ARCHITECTURAL AND ELECTRICAL

2. Doors 40A and 40B. The response to the previous Rider Comment 6, and the 6/1/98 letter, J. Aliotta to J. Gertler, requesting reconsideration of previous Rider Comment 6 on locked door in the path of egress, are acknowledged. The access control system does require either BS&A or MEA approval. See NYC Building Code Section 27-131. Note that any system that connects to the fire alarm system must preserve the integrity of the fire alarm system. As the proposed access control system does not have New York City approval, it cannot be accepted. It is suggested that the manufacturer applies to the MEA Division of the NYC Building Department For approval of the access control system and submit to them the UL information as the basis for obtaining the MEA approval. (Modified Repeat Comment)

Response: Doors 40A and 40B have a Schlage electric lock for which we have previously submitted BS & A No. 680-85-SA. (See door & hardware schedule for reference from previous submission) The fire alarm system is tied in to the electric lock for the release of the doors in case of emergency and not the card readers in question. Therefore the integrity of the fire alarm system is not affected by the components of the card reader.

STRUCTURAL

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295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059

3 **Drawing A-1-1, Detail 10.** Indicate the weight of the oil drum and submit details of its connection to the floor above.

Response: Oil drum detail for the leak detection of fuel oil piping has been revised as per attached FSK-41, OIL LEAK DETECTION BASIN @ 1st FLOOR. No structural calculations are required. The receptor at full capacity will not exceed 300 LBS.

4. **Drawing D-6, Detail 10.** Please verify that it is required to remove the existing column and cross bracing as per note on the detail. Note that work is not shown on structural drawings and no supporting calculations are provided.

Response: The note on detail #10 Drawing D-6 is pointing to the removal of the gyp. bd. enclosures around the steel bracing and the columns and not the steel. (Attached please find revised comma location on drawing note FSK-42)

5. Regarding the response to Comment 15 of the previous Rider, please note that the weight and location of each piece of machinery and equipment, such as fuel tank, weighing more than one thousand pounds shall be actually shown on the drawings. Making such a statement in the note on the drawings is not sufficient. See Code Section 27-135(b) (3). (Modified Repeat Comment)

Response: See attached Drawing S-1

6. Calculations

a. **Design of 23rd Floor Framing**. The total dead load on the beams (see sheets 27, 31, 36, 35c.) is 90 psf, as per Loading Criteria, Sheet 1, whereas in Calculations it is taken as 75 psf. Please revise.

Response: See Attached.

b. **Sheets 22 and 22A.** The shear design of the existing first floor slab to support the new Fuel Oil tank construction and to accommodate the new trenches is noted. Indicate on the drawings the existing slab construction and verify with calculations that the bending stresses in the existing slab are not exceeded.

Response: See Attached.

c. **Sheet 27.**

i. The live load on both sides of files shall be included.
ii Verify that the existing connections are not overstressed under the added loads.

Response: See Attached.

d. **Sheets 31 and 36.**

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212 226 9696, Fax 212 219 0059

i. The weight of library shelving shall be taken as 46 pcf plus weight of the shelves.
ii. The live load in the Library Reading room shall be 60 psf, not 50 psf as in the Calculations.

Response: See Attached.

e. **Sheet 59.** Use the actual live load for Radio Room floor instead of 30 psf snow load used in the original calculations.

Response: See Attached.

f. **Sheet 64.**

i. Verify that total reaction from 16 feet antenna on the supporting structure is 30 lbs. as per calculation. Submit data from the manufacturer.
ii. The length of the antenna support is 3 feet as per Detail on drawings S-5, whereas in the Calculations the same length is only 1.5 feet. Please reconcile.

Response: See Attached.

FIRE PROTECTION

7. General comments in the response to the previous comments states the Televator storage room is protected by a high hazard sprinkler system as shown on Reference Drawing *FP1.01*. As per NYC Building Code reference standard RS17-2 (1998 edition NFPA 13) the protection area per high hazard sprinkler shall not exceed 100 sq. ft. The drawing shows a maximum protection area per sprinkler of 168 sq. ft. Please revise to comply.

Response: See Attached SKP-1 & SKP-2.

Swanke Hayden Connell Ltd./Swanke Hayden Connell & Partners LLP
295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059

THE P[illegible] AUTHORITY OF NEW YORK AND NE[illegible]ERSEY
TENANT ALTERATION APPLICATION REVIEW REQUEST

MEMO 11/30

DISTRIBUTION		
o	To	Facility
	QAD	51 N
	~~D. Warren~~	~~PATC~~
		ZIP43
	~~S.P. Chiao~~	~~88-S~~
	~~G. Daly~~	~~88-S~~
	~~S. Batra~~	~~2WTC~~
		37FL
	~~C. Bonacci~~	~~2WTC~~
		~~35FL~~

Facility 8 FLR 23 TAA No. 987134 Date 11/5/98

Application / Tenant SILVERSTEIN PROPERTIES

Consultant SWANKE HAYDEN CONNELL

Estimated Cost _____ Submittal No. _____

Description of Work

Please review the attached (revised) application and send comments to:

Name JEFFREY GERTLER

Location: 1 WTC - 88 - South Phone: 435-4531

/ / DUE DATE

OFFICE COPY

DESIGN DISCIPLINES

- Architectural
- Egress Analysis
- Structural
- HVAC
- Plumbing
- Sprinkler
- Electrical
- Utility > 600 V
- Civil
- Geotechnical
- Environmental
- Fueling
- Radio Freq. Coord.
- Corrosion Protection
- Elevator / Escalator
- Other_____

ATTACHMENTS

- ☐ Document List
- ☐ Contract Drawings
- ☐ Contract Specifications
- ☐ Tenant Response
- ☐ Computations
- ☐ Reports
- ☐ Catalog Cuts
- ☐ Other

DESCRIPTION

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV.
DESIGN STANDARDS
NOV - 5 1998
W98-7134 (4)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

Special Instructions

REQUESTING REVIEW BY APPOINTMENT FOR FRIDAY NOVEMBER 13, 1998

Copy To: G. Gaeta, J. Napolitano, E. Monteverde, N. Seliga

_____(Proj. Mgr.)

Jeffrey Gertler
Signature

form:gertler/TAA/review revised 3/3/98

SWANKE HAYDEN CONNELL ARCHITECTS

Fax Message

To: Mr. Jeffrey Gertler
Port Authority of NY & NJ

From: Joseph J. Aliotta

Fax: (212) 435-8168

Job: 5576A

Date: 11-05-98 10:00 AM Pages: 2

Message:

Re: **Mayor's Office of Emergency Management**
7 World Trade Center
New York, New York
TAA No. 987.134
"Response to PA Attachment B List of Comments-Submission #3-Conditional Approval"

SHCA requests a review by appointment for the above referenced project to respond to comments attached to Mr. Joseph Napolitano's letter dated October 19, 1998.

SHCA requests the review date to be Friday, November 13, 1998.

SHCA will forward revised drawings, sketches and calculations to your attention by 12:00 noon of Thursday, November 12, 1998.

Attached please find the list of drawings, sketches and calculations for the submission

Please confirm the total number sets you require including the 3 sets that are required to be signed and sealed. SHCA will proceed sending 13 sets per previous submissions unless directed otherwise from you.

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Should you have any questions, please call.

Cc: J. Mejia-SHCA
W. Weems-Silverstein (732-5190)

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SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
7 World Trade Center
New York, New York

SHCA Project No. 5576A
Date: November 5, 1998

LIST OF DRAWINGS
Issued for P. A. Approval

DRAWING NUMBER	DRAWING TITLE	ISSUE DATE
Architectural		
FSK-26	PART PLAN & ELEVATION @ PENTHOUSE	11/6/98
FSK-27	PIPE & CATWALK SUPPORT @ DISHES	11/6/98
FSK-41	OIL LEAK DETECTION BASIN @ 1ST. FLOOR	11/4/98
FSK-42	REVISED DETAIL 10 FROM SHEET D-6	11/4/98
Fire Protection		
SKP-1	SPRINKLER PLAN @ FUEL OIL TANK LEVEL	11/3/98
SKP-2	SPRINKLER PLAN @ TELEVATOR STORAGE LEVEL	11/3/98
Structural		
SK S-7.1	7TH. FLOOR NEW STEEL SUPPORT FOR WATER TANK	9/28/98
SK S-7.2	7TH. FLOOR CONCRETE PAD @ SWITCHGEAR	9/28/98
SK S-S1	FIRST FLOOR BEAM PENETRATIONS	10/15/98
SK S-FS-7	SECTION @ FIRST FLOOR TRENCH AREA	10/15/98
SK S-S2	NOTVH @ EXISTING BEAMS @ FIRST FLOOR	10/16/98
SK 22.a 1	FUEL OIL TANK AREA	10/28/98
66	7TH. FLOOR OPENING @ EXISTING BEAM	10/28/98
67	7TH. FLOOR OPENING @ EXISTING BEAM	10/28/98
SK S-RA	ROOF ANTENA SUPPORT	11/6/98
S-1	1ST FLOOR FARMING PLAN	11/4/98
CALCULATIONS		
41 PAGES	STRUCTURAL CALCULATIONS	Oct-98

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ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS

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TENANT CONSTRUCTION REVIEW UNIT

THE PORT AUTHORITY OF NY & NJ

ONE WORLD TRADE CENTER
NEW YORK, NY 10048

(212) 435-7000
(973) 961-6600

October 19,1998

Swanke Hayden Connell Architects
295 Lafayette Street
New York, N.Y. 10012

Subject: 7 WORLD TRADE CENTER – 23rd FLOOR
MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA 987.134
SUBMISSION #3 - CONDITIONAL APPROVAL

Dear Mr. Joseph Aliotta:

This letter responds to your submittal dated September 25, 1998, forwarding for review the documents listed in Attachment A to this letter. Tenant Alteration Application # 987.134 has been approved subject to compliance with the comments listed in Attachment B to this letter.

Incorporate the requirements of the comments into the construction documents, respond to each comment in writing, and submit nine (9) sets of the revised documents by October 30, 1998. The revised documents shall be signed and sealed by the Engineer or Architect-of-record who is licensed to practice in the State of New York. Indicate the latest revision number on each drawing in the title box, circle each revision and indicate the latest revision number inside a triangle. Your co-operation in meeting the submission date for comment resolution will assist in meeting your client's schedule for occupancy.

Any changes to the already approved scope-of-work must be submitted to the Port Authority for review and approval prior to the commencement of associated work. Only contract documents reviewed and approved by this office are to be released in the field for construction.

All correspondence or inquiries should be directed to Jeffrey Gertler, Port Authority, One World Trade Center, 88 South, New York, N.Y. 10048, (212) 435-4531.

Sincerely,

Joseph Napolitano
Supervisor, Tenant Alteration Applications and Base Building Programs
The World Trade Department

cc: Silverstein Properties, Walter Weems

THE PORT AUTHORITY OF NY & NJ
QUALITY ASSURANCE DIV.
ENGINEERING DEPT.
OCT 28 1998
RECEIVED
NOTED:
REFERRED TO:

bcc: D. Bergstein, S. Bhol, A.Fadavi, J. Gertler, T. Koebel, R. Lynch, L. Menno, E. Monteverde, S. Murry, J. Napolitano, J. Protas, R. Rafferty, Central File, Chrono File

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #3

Subject to compliance with the requirements listed in this memorandum's rider, the following is a revised list of drawings recommended for approval. All changes from the previous list are shown in **boldface**:

Drawing		
T-1	**revised**	**9/25/98**
A-EG-23	**revised**	**9/25/98**
A-1-1	**revised**	**9/25/98**
A-7-1	**revised**	**7/24/98**
A-23-1	**revised**	**9/25/98**
A-23-2	**revised**	**7/24/98**
A-23-3	**revised**	**9/25/98**
A-23-4	**revised**	**9/25/98**
A-23-5	**revised**	**5/04/98**
A-23-6	revised	5/04/98
A-48-1	revised	5/04/98
D-O	**revised**	**9/25/98**
D-1	**revised**	**9/25/98**
D-2	**revised**	**7/24/98**
D-3	revised	5/04/98
D-4	**revised**	**9/25/98**
D-5	revised	5/04/98
D-6	**revised**	**7/24/98**
D-7	**revised**	**7/24/98**
D-8	revised	5/04/98
D-9	**revised**	**7/24/98**
D-10	**revised**	**9/25/98**
D-11	**revised**	**7/24/98**
D-12	revised	5/04/98
D-13	**revised**	**9/25/98**
Workstation Plan	**revised**	**5/04/98**
Panel/Energy Plan	**revised**	**5/04/98**
M1.01	**revised**	**9/25/98**
M1.07	**revised**	**9/25/98**
M1.23	**revised**	**9/25/98**
M4.01	**revised**	**9/25/98**
E0.01	**revised**	**5/15/98**
E1.01	**revised**	**9/25/98**
E1.07	**revised**	**7/24/98**
E1.48	**revised**	**5/04/98**
E6.01	**revised**	**5/04/98**

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #3

E6.02	**revised**	**5/04/98**
E2.23	**revised**	**9/25/98**
E3.01	**revised**	**9/25/98**
E4.01	**revised**	**9/25/98**
E4.02	**revised**	**9/25/98**
E4.03	**revised**	**9/25/98**
P1.01	revised	5/13/98
P2.07	revised	5/13/98
P3.23	**revised**	**9/25/98**
P4.23	**revised**	**9/25/98**
P5.23	revised	5/13/98
FP1.01	**revised**	**9/25/98**
FP2.07	revised	5/13/98
FP3.23	**revised**	**5/15/98**
FP4.23	**revised**	**9/25/98**
FP5.23	**revised**	**5/15/98**
FP6.23	revised	5/13/98
TC-101	revised	5/13/98
S-1	**revised**	**9/25/98**
S-2	**revised**	**9/25/98**
S-3	**revised**	**9/25/98**
S-4	**revised**	**9/25/98**
S-5	**revised**	**9/25/98**
038Z001	**revised**	**7/24/98**
038L005	**revised**	**5/15/98**
038L002	**revised**	**7/24/98**
038L003	**revised**	**7/24/98**
H5	**dated**	**3/08/98**
AV-1	**revised**	**5/04/98**
AV-2	**revised**	**5/04/98**
AV-3	**revised**	**5/04/98**
AV-4	**revised**	**5/04/98**
AV-EO	**revised**	**5/04/98**
AV-E1	**revised**	**7/24/98**
AV-E2	**revised**	**5/04/98**
AV-E3	**revised**	**5/04/98**
AV-E4	**revised**	**5/04/98**
AV-E5	**revised**	**5/04/98**
AV-S1	**revised**	**5/04/98**
AV-S3	**revised**	**5/04/98**
AV-S2	**revised**	**5/04/98**
AV-S4	**revised**	**5/04/98**

ATTACHMENT A – LIST OF DRAWINGS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #3

AV-S5	revised	5/04/98
AV-S6	revised	7/24/98
AV-S7	revised	7/24/98
AV-S8	revised	5/04/98
TC-100	revised	5/04/98
TC-101	revised	9/25/98
TC-103	revised	5/04/98
TC-103A	revised	5/04/98
TC-103B	revised	5/04/98

101998

ATTACHMENT B – LIST OF COMMENTS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #3

QUALITITY ASSURANCE DIVISION COMMENTS

ARCHITECTURAL

1. Drawing A-23-1 and A-23-5. The response to Comment 2.b of the previous rider is noted; however, Door 3 is in a two-hour rated wall. The door is not rated and will not maintain the integrity of the fire partition. Please provide a fire rated door as required. (Modified repeat comment)

ARCHITECTURAL AND ELECTRICAL

2. Doors 40A and 40B. The response to the previous Rider Comment 6, and the 6/1/98 letter, J. Aliotta to J. Gertler, requesting reconsideration of previous Rider Comment 6 on locked doors in the path of egress, are acknowledged. The access control system does require either BS&A or MEA approval. See NYC Building Code Section 27-131. Note that any system that connects to the fire alarm system must preserve the integrity of the fire alarm system. As the proposed access control system does not have New York City approval, it cannot be accepted. It is suggested that the manufacturer applies to the MEA Division of the NYC Building Department for approval of the access control system and submit to them the UL information as the basis for obtaining the MEA approval. (Modified Repeat Comment)

STRUCTURAL

3. Drawing A-1-1, Detail 10. Indicate the weight of the oil drum and submit details of its connection to the floor above.

4. Drawing D-6, Detail 10. Please verify that it is required to remove the existing column and cross bracing as per note on the detail. Note that work is not shown on structural drawings and no supporting calculations are provided.

5. Regarding the response to Comment 15 of the previous Rider, please note that the weight and location of each piece of machinery and equipment, such as fuel tank, weighing more than one thousand pounds shall be actually shown on the drawings. Making such a statement in the note on the drawings is not sufficient. See Code Section 27-135(b)(3). (Modified Repeat Comment)

ATTACHMENT B – LIST OF COMMENTS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #3

6. Calculations

a) Design of 23rd Floor Framing. The total dead load on the beams (see sheets 27, 31, 36, 35c.) is 90 psf, as per Loading Criteria, Sheet 1, whereas in Calculations it is taken as 75 psf. Please revise.

b) Sheets 22 and 22A. The shear design of the existing first floor slab to support the new Fuel Oil tank construction and to accommodate the new trenches is noted. Indicate on the drawings the existing slab construction and verify with calculations that the bending stresses in the existing slab are not exceeded.

c) Sheet 27

i) The live load on both sides of files shall be included.

ii) Verify that the existing connections are not overstressed under the added loads.

d) Sheets 31 and 36:

i) The weight of library shelving shall be taken as 46 pcf plus weight of the shelves.

ii) The live load in the library Reading Room shall be 60 psf, not 50 psf as in the Calculations.

e) Sheet 59. Use the actual live load for Radio Room floor instead of 30 psf snow load used in the original calculations.

f) Sheet 64

i) Verify that the total reaction from 16 feet antenna on the supporting structure is 30 lbs as per calculations. Submit data from the manufacturer.

ii) The length of the antenna support is 3 feet as per Detail on Drawing S-5, whereas in the Calculations the same length is only 1.5 feet. Please reconcile.

ATTACHMENT B – LIST OF COMMENTS
7 WTC – MAYOR'S EMERGENCY MANAGEMENT OFFICE
TAA – 987134
SUBMISSION #3

FIRE PROTECTION

7. General Comment in the response to the previous comments states the Televator storage room is protected by a high hazard sprinkler system as shown on Reference Drawing FP1.01. As per NYC Building Code reference standard RS17-2 (1989 edition NFPA 13) the protection area per high hazard sprinkler shall not exceed 100 sq. ft. The drawing shows a maximum protection area per sprinkler of 168 sq. ft. Please revise to comply.

101998

SWANKE HAYDEN CONNELL ARCHITECTS

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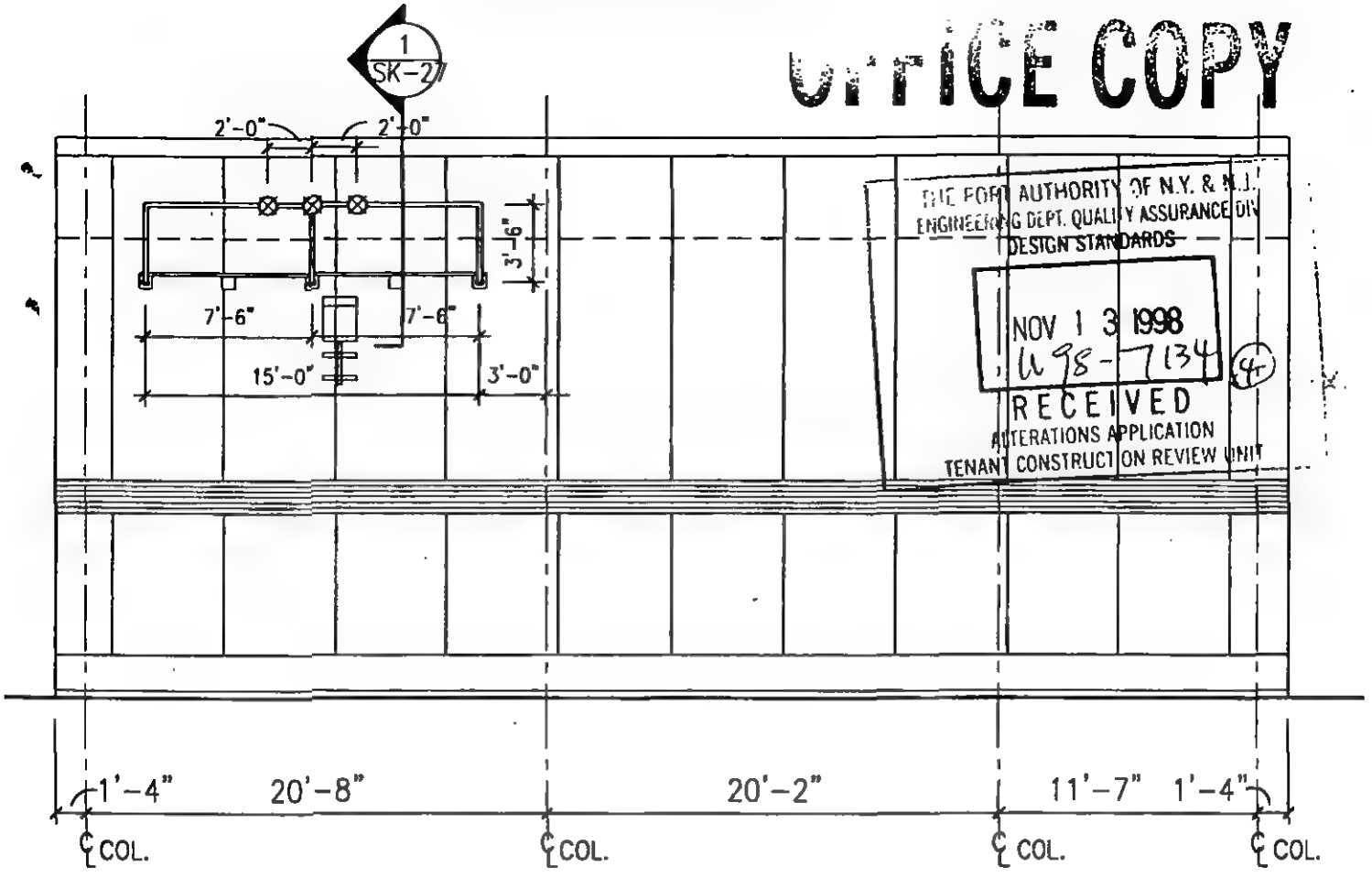
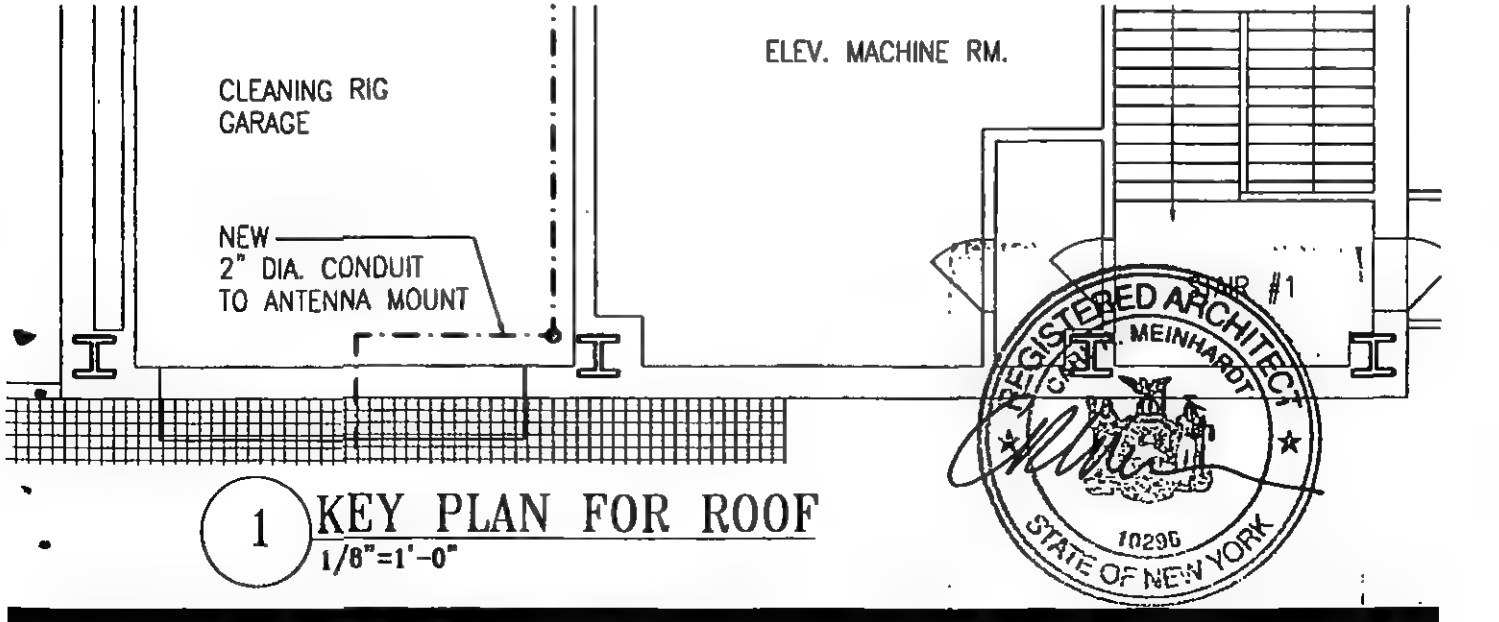


A NORTH ELEVATION @ PENTHOUSE
1/8"=1'-0"



1 KEY PLAN FOR ROOF
1/8"=1'-0"

Date Revisions	Job Title/Drawing Title	Scale	
11/9/98 REV. NORTH. ELEV.	MAYORS OFFICE OF EMERGENCY MANAGEMENT	1/8"=1'-0"	FSK-26
	NORTH ELEV. @ PENTHOUSE	Drawn By	
		Issued 10.08.98	Job No. 5576A

Swanke Hayden Connell Ltd
295 Lafayette St., New York, New York 10012
212 226 9696, Fax 212 219 0059

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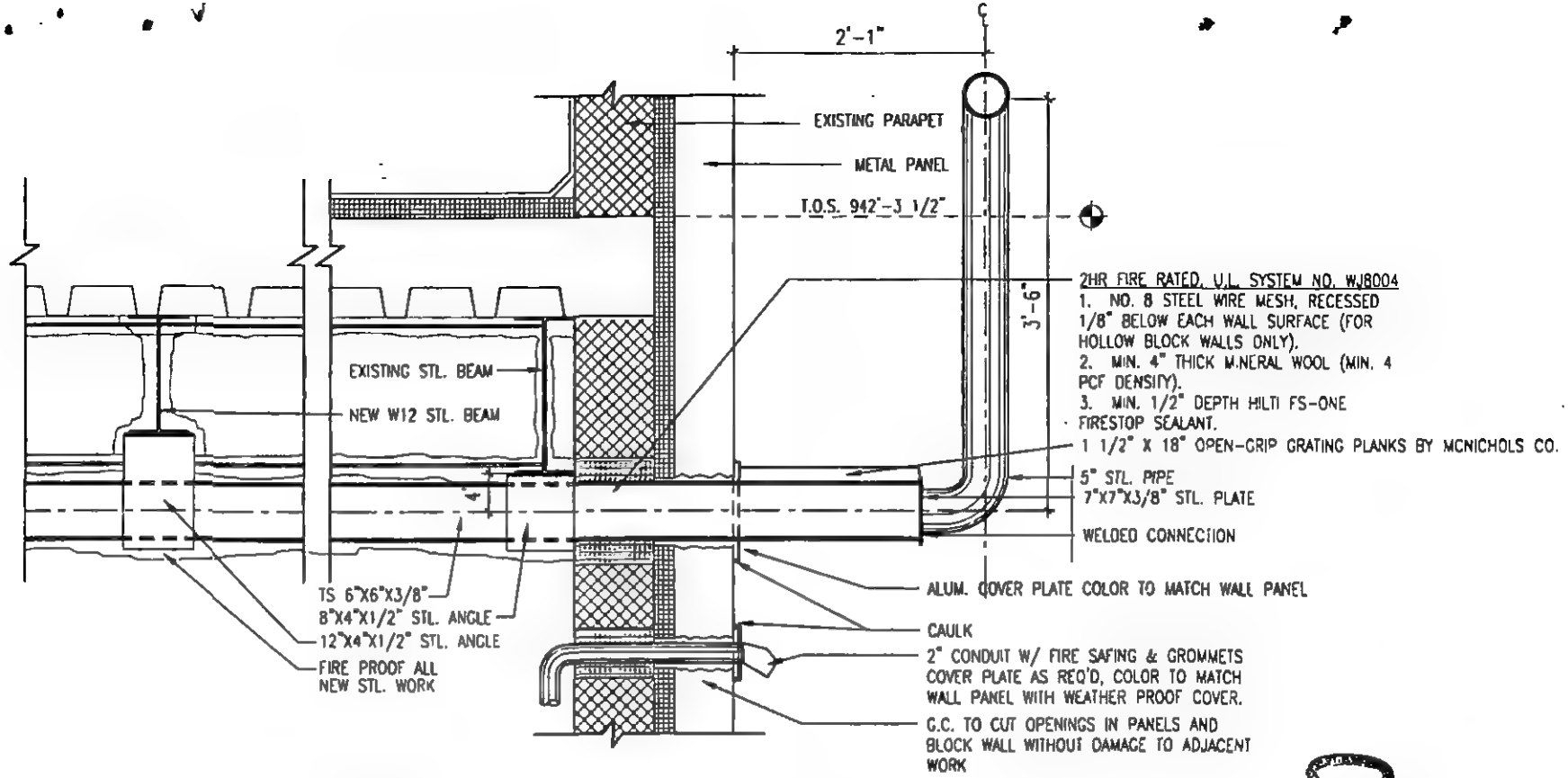

NOTES:
1) PROVIDE FIRE SAFING @ NEW 2" CONDUIT PENETRATIONS AS REQUIRED BY INSTALLATION
2) MICRO WAVE DISH SUPPORTS PROVIDED BY VENDOR
3) SEE STRUCTURAL SKETCH FOR WELDING INFORMATION
4) G.C. TO COORDINATE 6"X6" STEEL TUBE SUPPORT WITH EXISTING LIGHT FIXTURE

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No	Date	Revisions
1	11/9/98	ADDED GRATING & RAISED PIPE

REGISTERED ARCHITECT
CARL R. MEINHARDT
10296
STATE OF NEW YORK

Job Title/Drawing Title
MAYORS OFFICE OF EMERGENCY MANAGEMENT
PIPE WALL SUPPORT @ DISHES

Swanke Hayden Connell Ltd
295 Lafayette St., New York, New York 10012
212 226 9696, Fax 212 219 0050

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Scale N.T.S.
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Issued 10/21/98
Job No. 5576A
FSK-27

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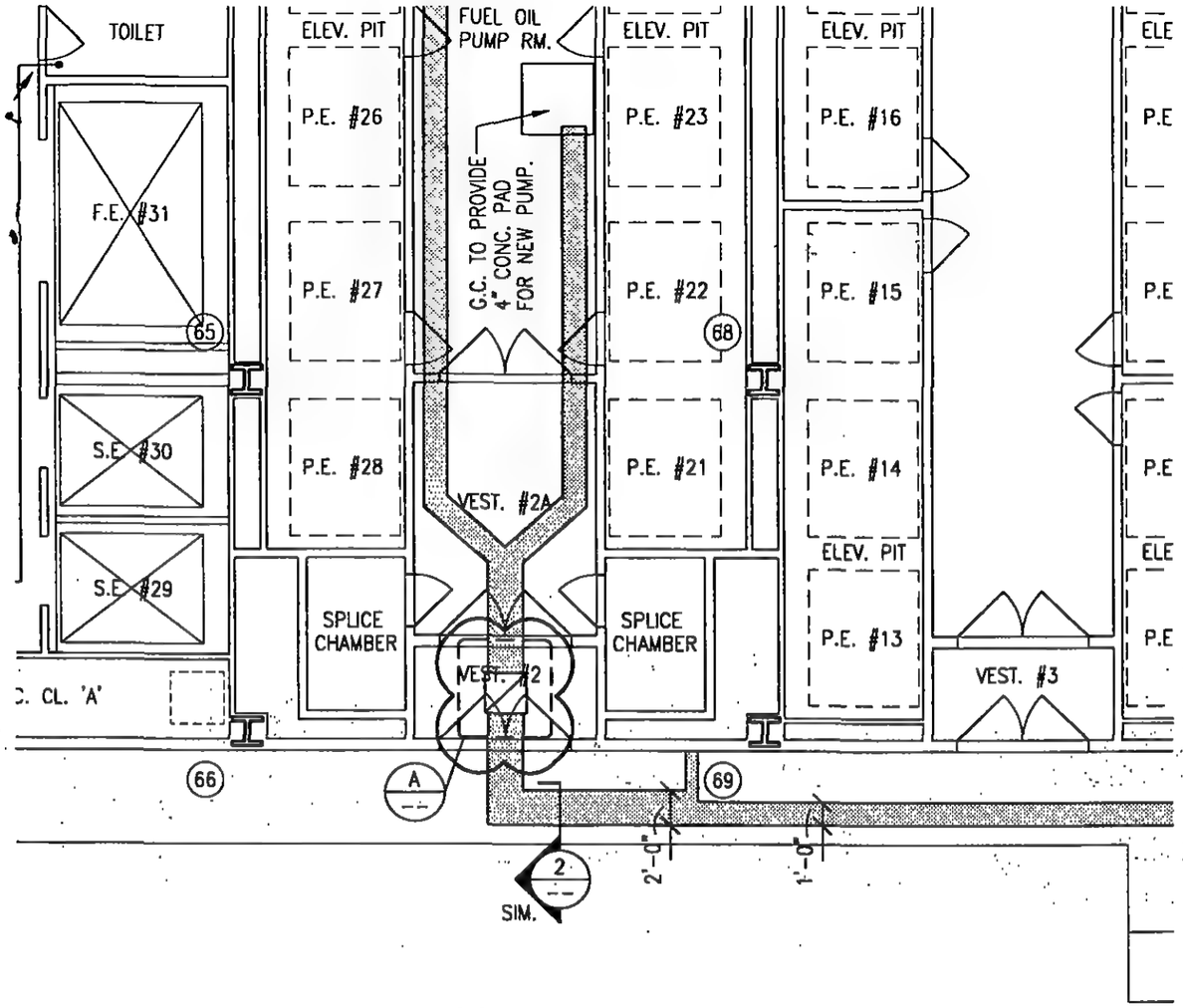

1 PART PLAN 1ST FLOOR
1/4" = 1'-0"

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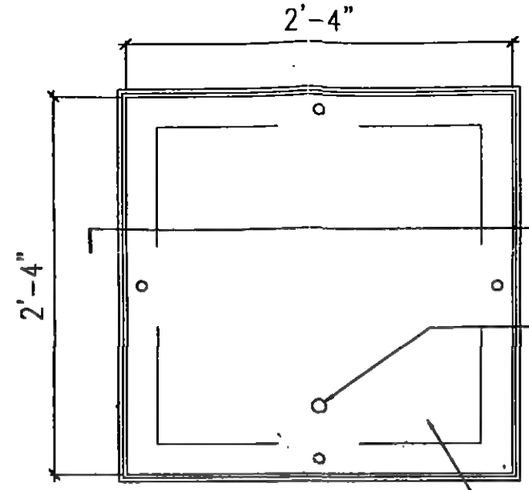
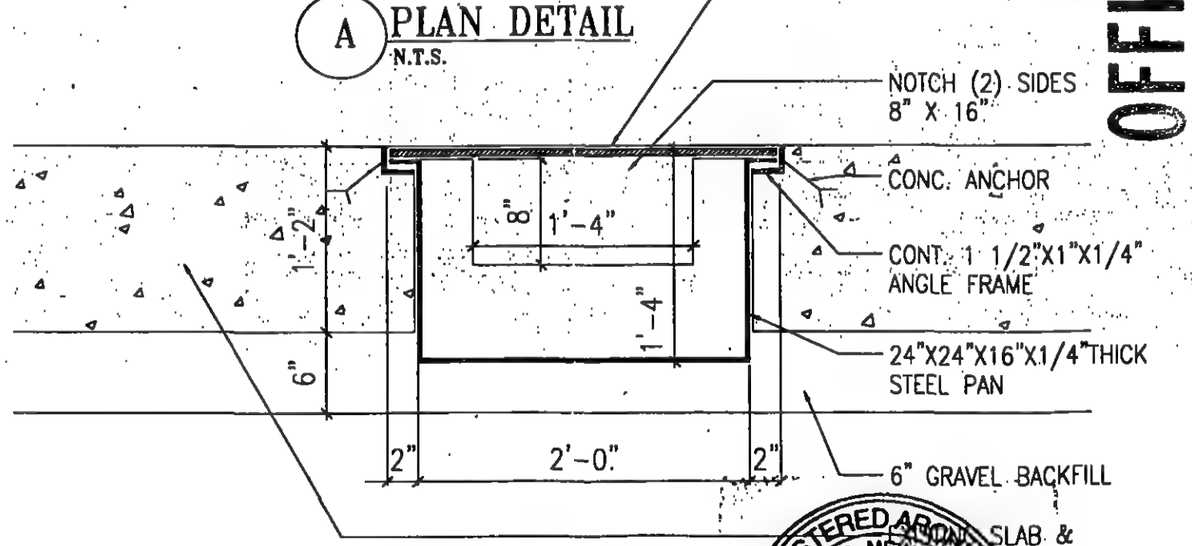


A PLAN DETAIL
N.T.S.



B SECTION DETAIL
N.T.S.

REGISTERED ARCHITECT
CARL R. METZ
10296
STATE OF NEW YORK

OFFICE COPY

No.	Date	Revisions

Job Title/Drawing Title
MAYORS OFFICE OF EMERGENCY MANAGEMENT
OIL LEAK DETECTION BASIN @1ST FLOOR

Swanke Hayden Connell Ltd
295 Lafayette St., New York, New York 10012
212 226 9696, Fax 212 219 0059

Scale N.T.S.
Drawn By
Issued 11/04/98
FSK-41
Job No. 5576A

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SWANKE HAYDEN CONNELL ARCHITECTS

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV
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NOV 13 1998
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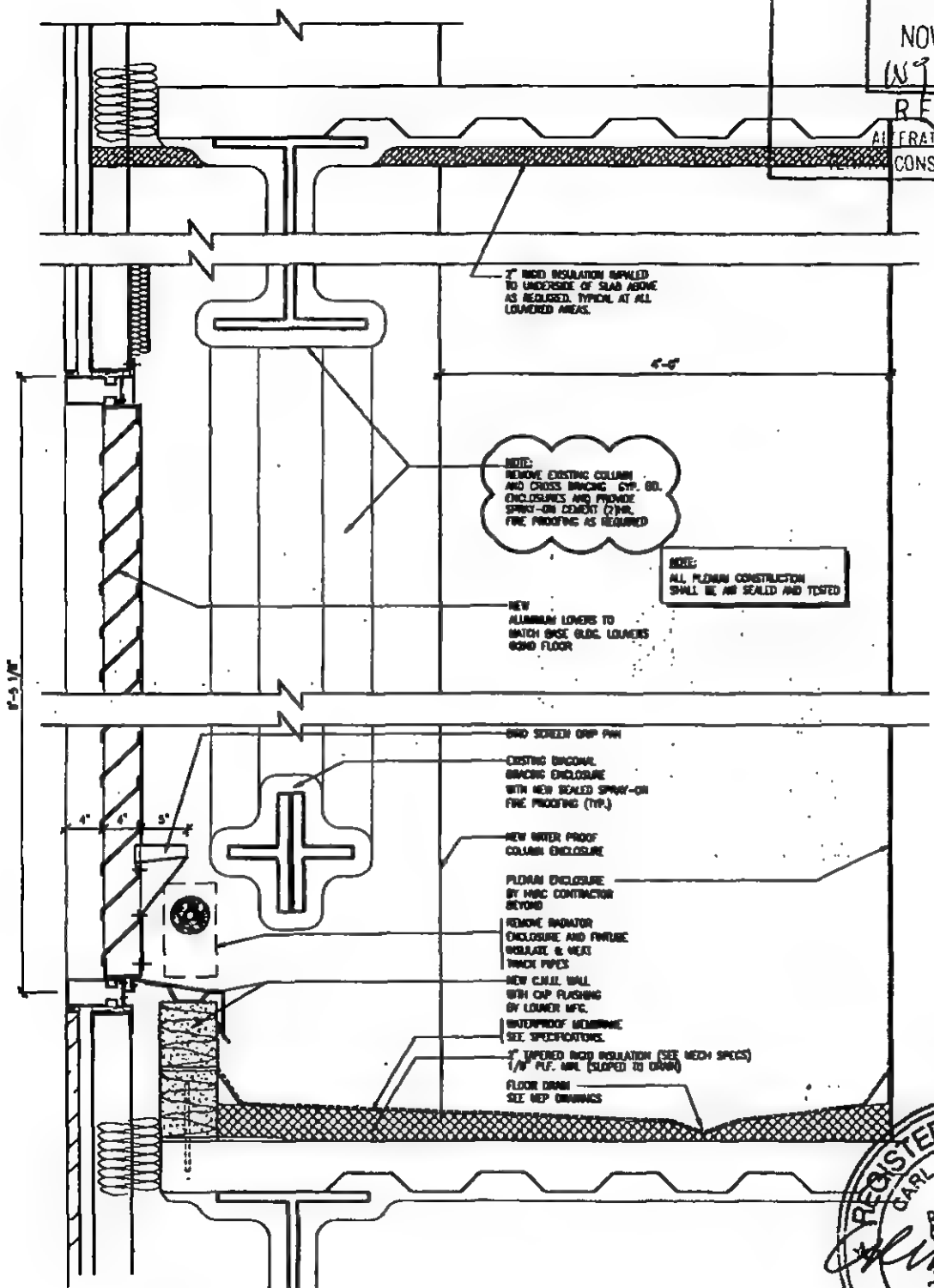

REGISTERED ARCHITECT
CARL R. MEINHARDT
10256
STATE OF NEW YORK

10 SECTION @ 23RD. FL. INTAKE & EXH. PLENUMS
1 1/2"=1'-0"

No.	Date	Revisions

Job Title/Drawing Title
MAYORS OFFICE OF EMERGENCY MANAGEMENT
DETAIL 10/ D-6

Swanke Hayden Connell Ltd
205 Lafayette St., New York, New York 10012
212 226 9696, Fax 212 219 0059

Scale N.T.S.
Drawn By
FSK-42
Issued NOVEMBER 6, 1998
Job No. 576A

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ENGINEERING DEPT QUALITY ASSURANCE
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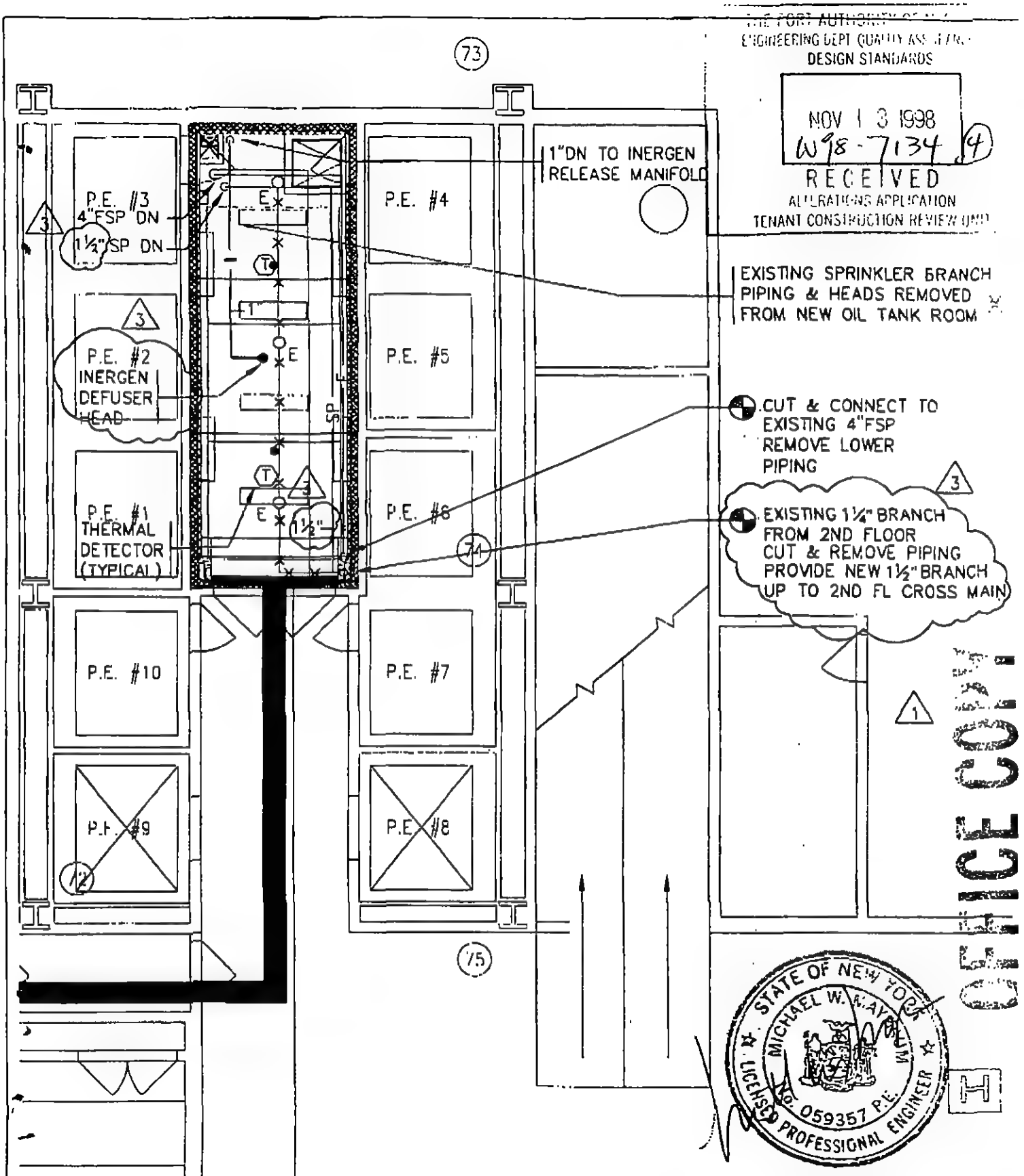

7 WORLD TRADE CENTER

NEW YORK, NEW YORK

Cosentini Associates LLP
CONSULTING ENGINEERS
TWO PENNSYLVANIA PLAZA, NEW YORK, N.Y. 10121

NO.	REVISION	DATE
3	INERGEN SPRINKLER SYSTEM REVISION	11-3-98

REF. DWG. NO. FP1-01	SKETCH NO. SKP-1
SCALE 1/8"=1'-0"	

THE PORT AUTHORITY OF N.Y.
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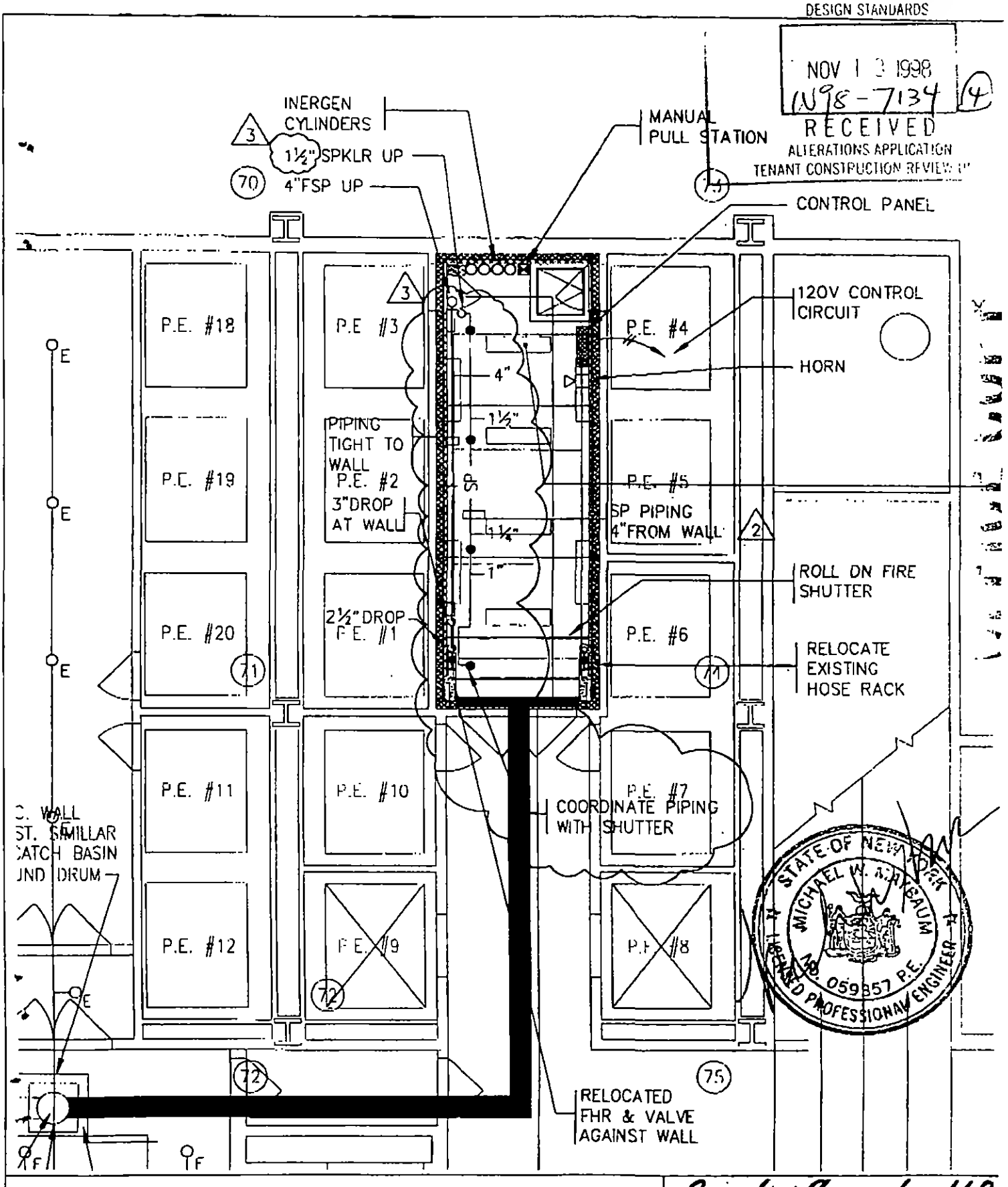
TENANT CONSTRUCTION REVIEW



STATE OF NEW YORK
MICHAEL W. ARBAUM
NO. 059857 P.E.
REGISTERED PROFESSIONAL ENGINEER

7 WORLD TRADE CENTER

NEW YORK, NEW YORK

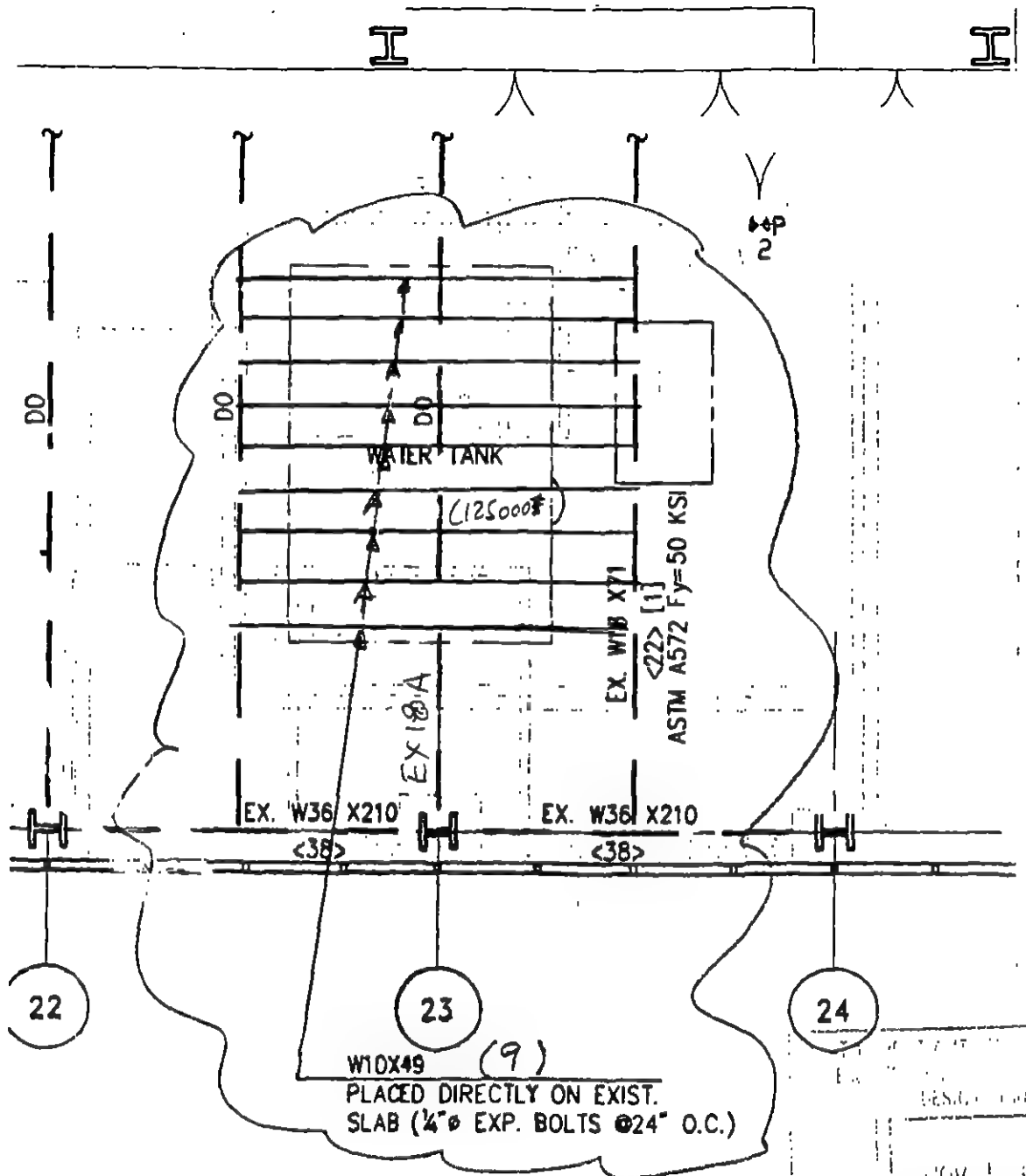
Cosentini Associates LLP
CONSULTING ENGINEERS
TWO PENNSYLVANIA PLAZA, NEW YORK, N.Y. 10121

NO.	REVISION	DATE
3	INERGEN SPRINKLER SYSTEM REVISION	11-3-98

REF. DWG. NO. FP1-01

SCALE 1/8"=1'-0"

SKETCH NO. SKP-2



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CANTOR SEINUK GROUP, PC

CONSULTING ENGINEERS
600 MADISON AVENUE
NEW YORK, NEW YORK 10022

STRUCTURE OEM - 7WTC -

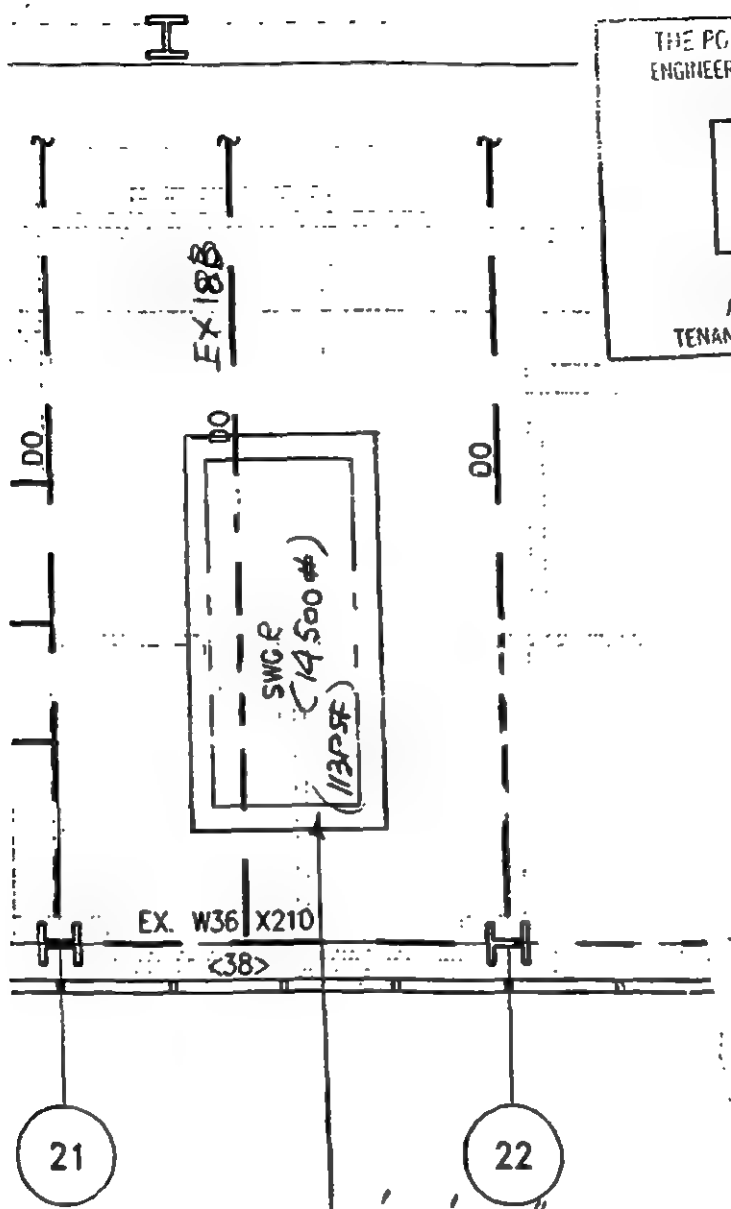
SUBJECT 7TH FLOOR
NEW STEEL SUPPORT FOR WATER TANK

ARCHITECT SHC

DATE 9/28/98

SK. S-7.1

3c



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ENGINEERING DEPT. QUALITY ASSURANCE
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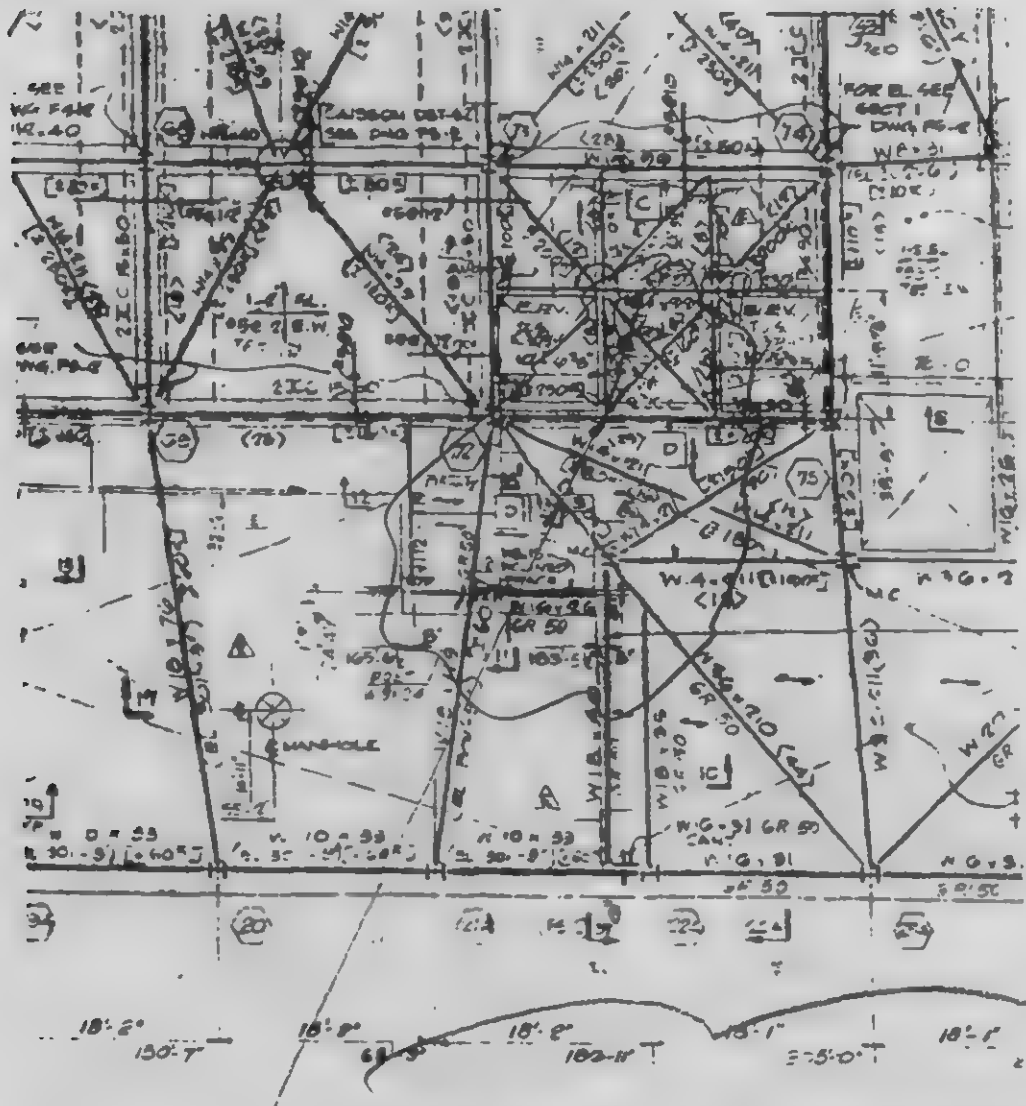
CANTOR SEINUK GROUP, PC CONSULTING ENGINEERS 600 MADISON AVENUE NEW YORK, NEW YORK 10022	STRUCTURE: OEM — 7WTC —
	SUBJECT: 7TH FLOOR CONCRETE PAD AT SWITCHGEAR
	ARCHITECT: SHC
	DATE: 9/28/98
	SK. S-7.2



AT THESE BEAMS IT IS ACCEPTABLE TO CUT A NOTCH — SEE SKS-S-2

FIRST FLOOR FRAMING PLAN

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NOV 1998
W98-7134
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

Re: S-1

DPR w/ SKS-IS-7

CANTOR SEINUK GROUP, PC CONSULTING ENGINEERS 600 MADISON AVENUE NEW YORK, NEW YORK 10022 CS	STRUCTURE: OEM 7 W TC
	SUBJECT: FIRST FL. BEAM PENETR.
	ARCHITECT: SHCA — DATE: 10/15/98 — SK. S-S-1

THE PORT AUTHORITY OF N.Y.
ENGINEERING DEPT QUALITY & SURVEILLANCE
DESIGN STANDARDS
NOV 13 1998
W98-7134 (9)
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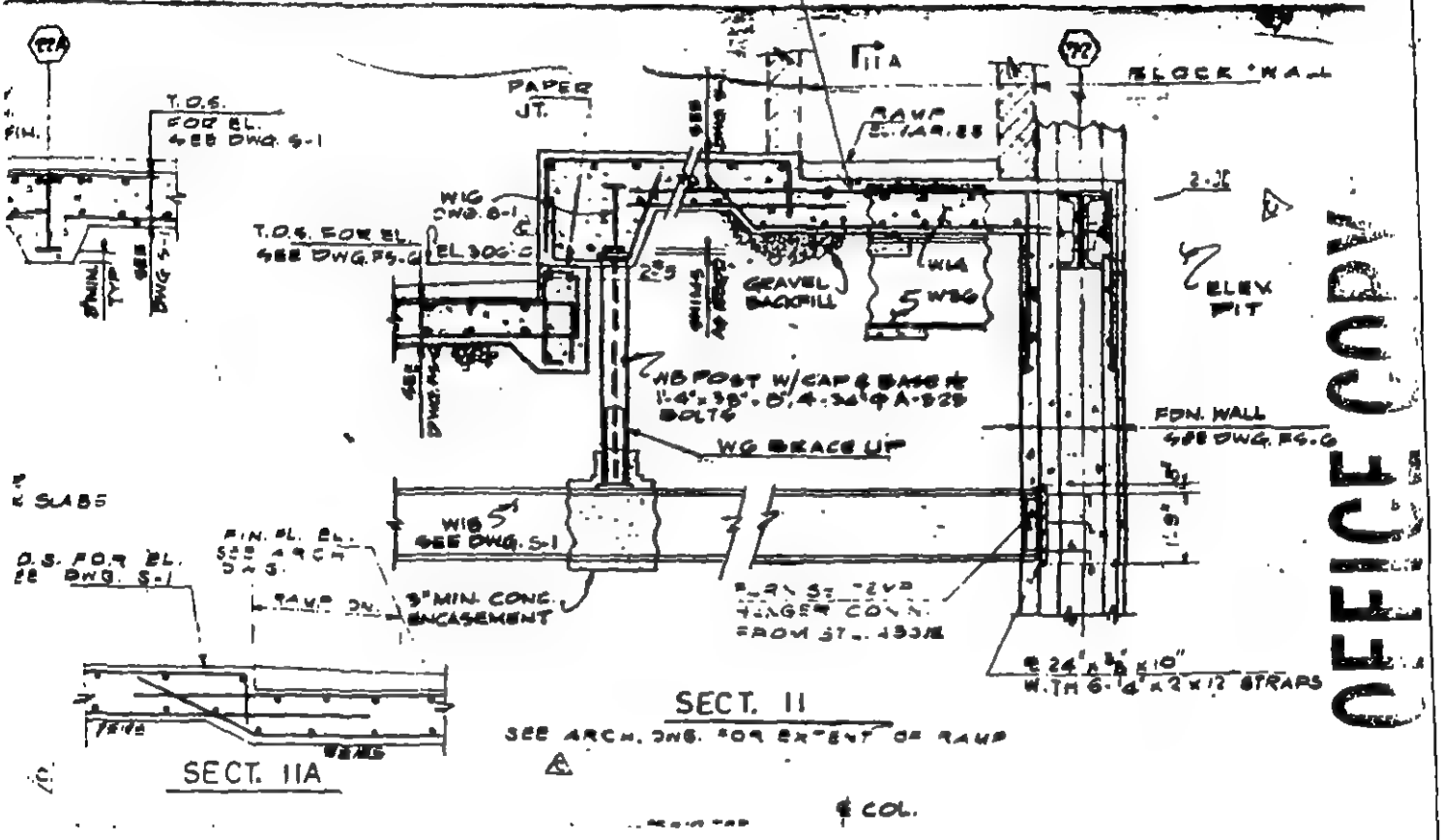
TENANT CONSTRUCTION REVIEW UNIT

AFTER CONDUITS ARE IN PLACE
RESTORE SLAB AROUND AND
REPLACE TOP REBAR & CUT.
SLAB AREA [C] OR [D]



AREA [D] – 1'-2" SLAB, #6 @ 9 BOTT, #5 @ 12 TOP, #5 @ 12 TEMP. REINF.

AREA [C] – 1'-2" SLAB, #6 @ 9 BOTT, #5 @ 10 TOP, #5 @ 12 TEMP. REINF.

WORK WITH SKS-S-1

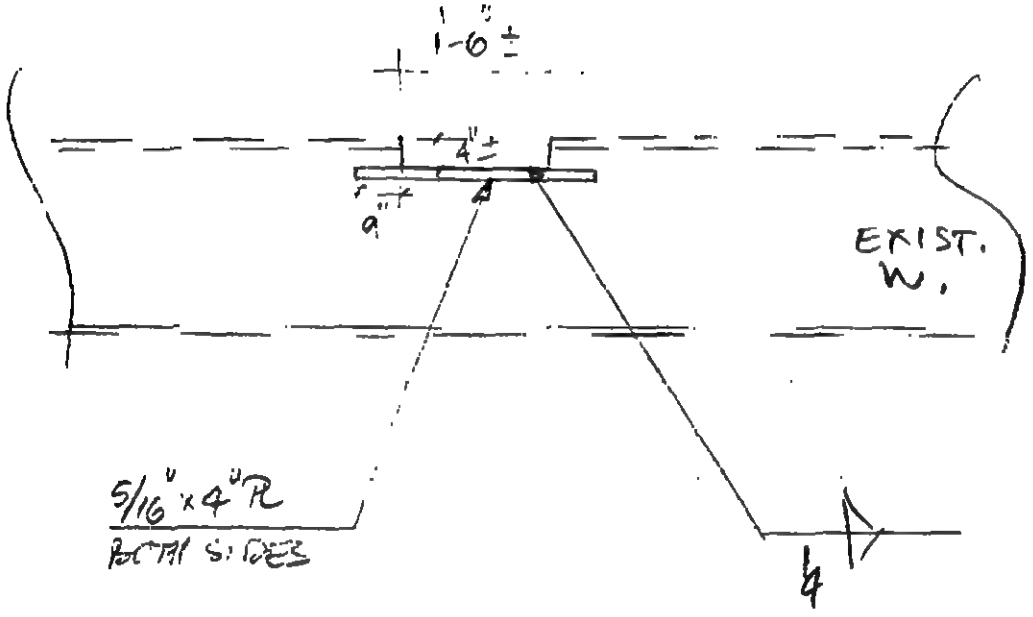
Rev. FS-7

CANTOR SEINUK GROUP, PC CONSULTING ENGINEERS 600 MADISON AVENUE NEW YORK, NEW YORK 10022	STRUCTURE: OEM 7 WTC
	SUBJECT: SECTION AT FIRST FL – TRENCH AREA
	ARCHITECT: SHCA
	DATE: 10/15/90
	SK. S-FS-7

OFFICE COPY

THE CANTOR SEIN[illegible] GROUP, P.C.
CONSULTING ENGINEERS
600 Madison Avenue
New York, N.Y. 10022
(212) 755-4242 FAX (212) 752-6924

JOB OEM 71.
SHEET NO. SKS 3-2 OF
CALCULATED BY DATE 10.16.98
CHECKED BY DATE
SCALE FIRST FL —



NOTCH AT EXIST. BEAMS AT FIRST FLOOR.

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THE PORT AUTHORITY OF
ENGINEERING DEPT. QUALITY &
DESIGN STANDARDS
NOV 13 1998
LW98-7134 (4)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

THE CANTOR SEINUK GROUP, P.C.
CONSULTING ENGINEERS
600 Madison Avenue
New York, N.Y. 10022
(212) 755-4242 FAX (212) 752-6924

JOB OEM
SHEET NO 2.1 OF
CALCULATED BY AB DATE 10.28.98
CHECKED BY
SCALE 1" = 1'-0"

THE PORT AUTHORITY OF N.Y.
ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS

NOV 13 1998
LW98-7134 (4)
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ALTERATIONS APPLICATION
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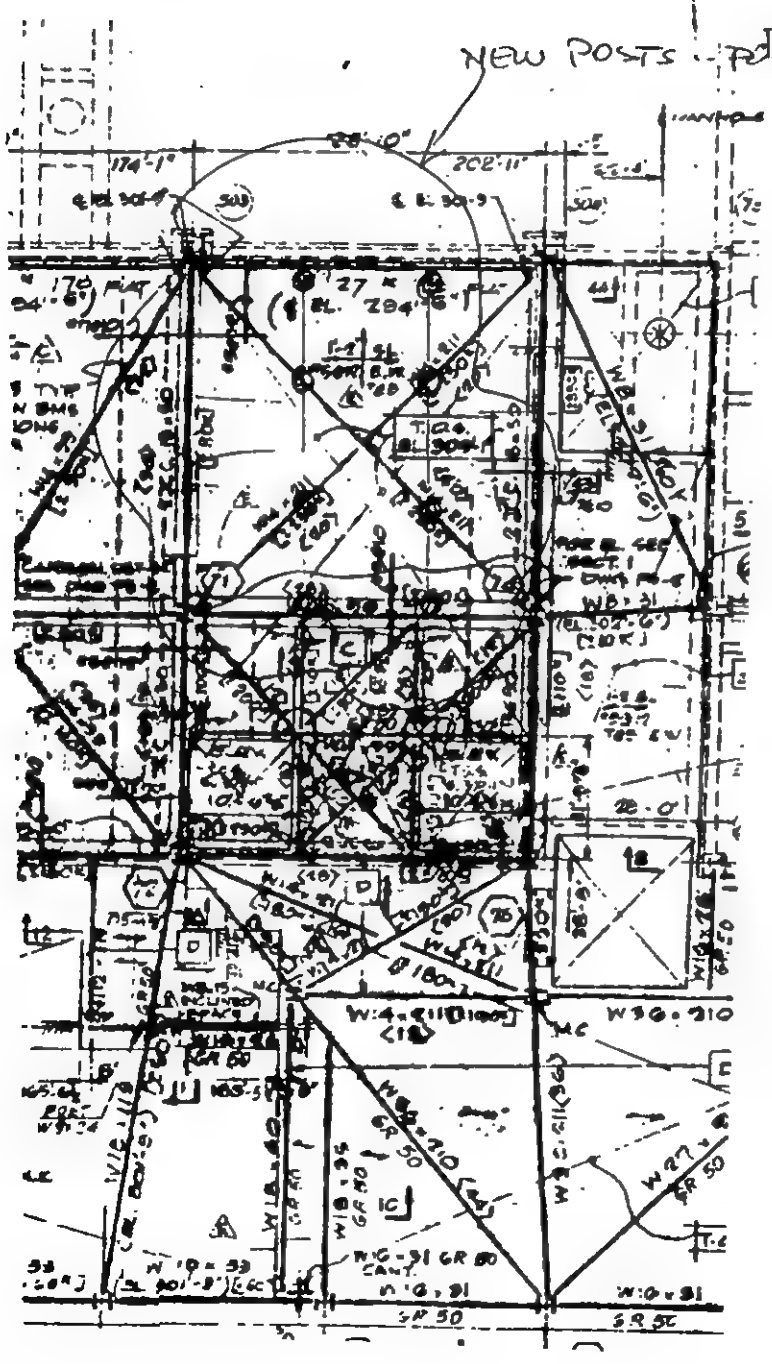
NEW POSTS TO SUPPORT THE TANK

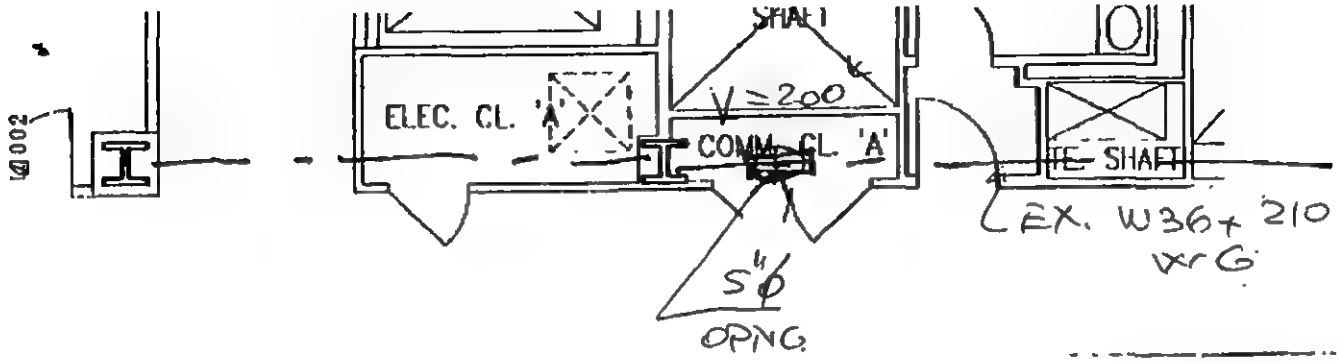


FUEL OIL TANK AREA

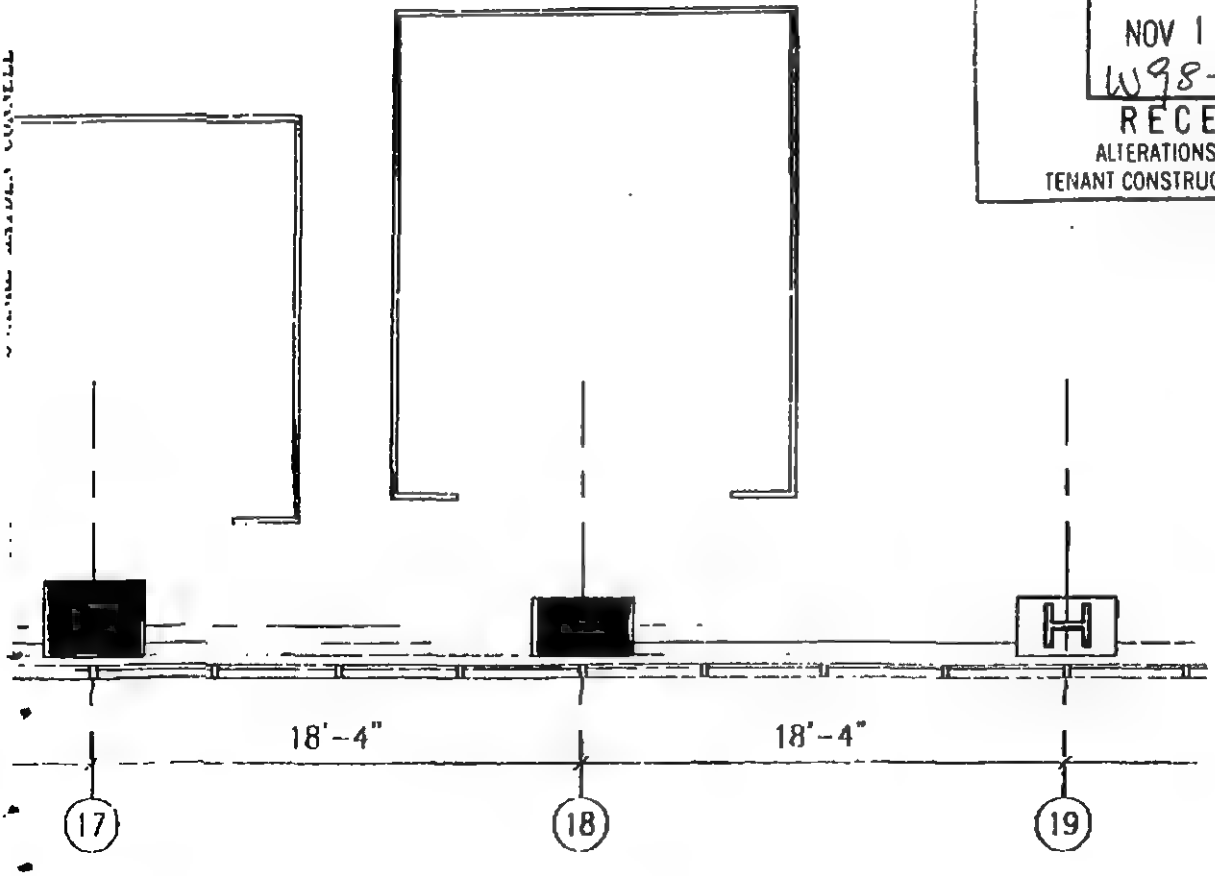
OFFICE COPY

THE CANTOR SEINUK GROUP, P.C.
CONSULTING ENGINEERS
600 Madison Avenue
New York, N.Y. 10022
(212) 755-4242 FAX (212) 752-6924

JOB OEM
SHEET NO. 66 OF
CALCULATED BY AB DATE 10.28.98
CHECKED BY DATE
SCALE 3/4"=1'-0"



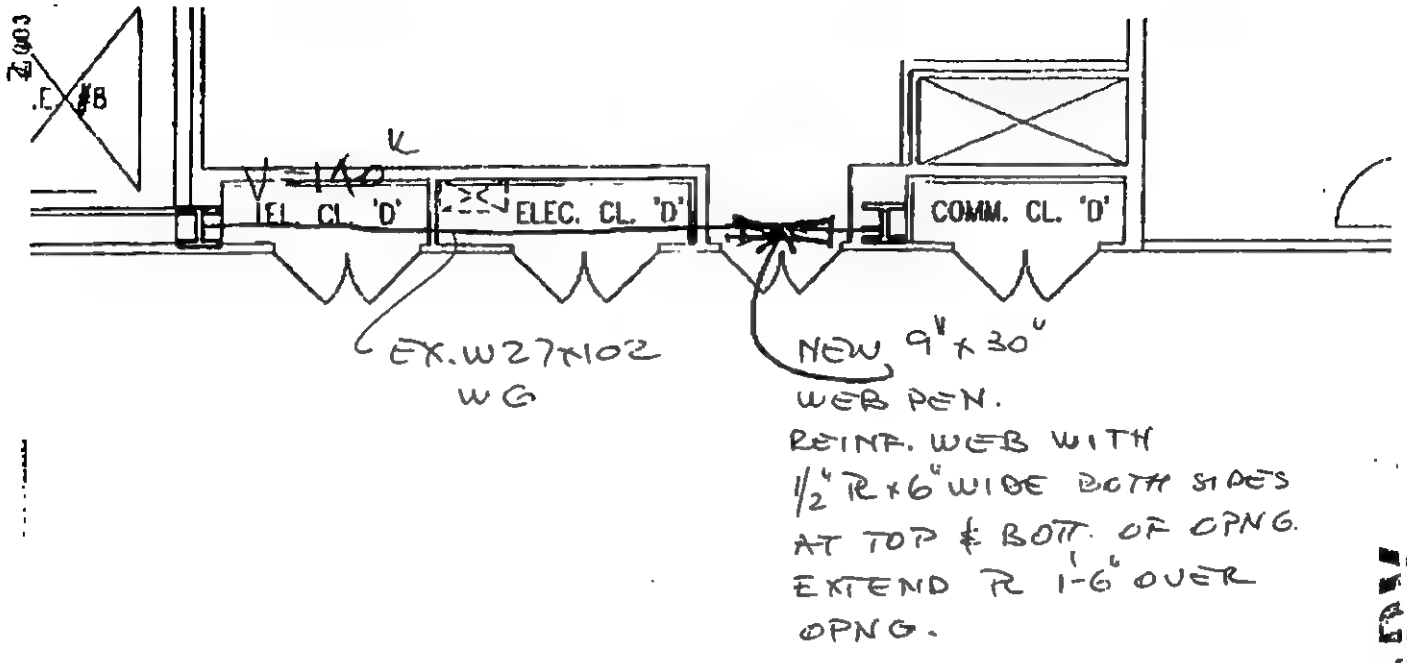
PORT AUTHORITY OF N.Y. & N.J.
ENG. DEPT. QUALITY ASSURANCE DIV.
DESIGN STANDARDS
NOV 13 1998
W98-7134 (4)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

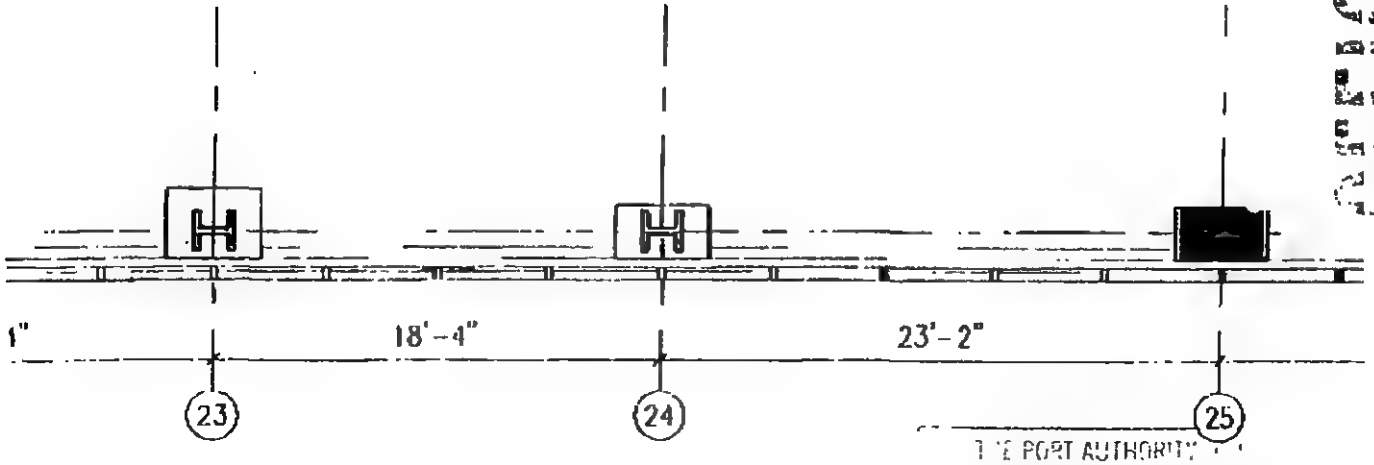


OFFICE COPY

THE CANTOR SEINUK GROUP, P.C.
CONSULTING ENGINEERS
600 Madison Avenue
New York, N.Y. 10022
(212) 755-4242 FAX (212) 752-6924

JOB OEM
SHEET NO. 67 OF
CALCULATED BY DATE
CHECKED BY AB DATE 10.28.98
SCALE 3/8" FT.





OFFICE COPY

THE PORT AUTHORITY
ENGINEERING DEPT QUALITY AS
DESIGN STANDARI

NOV 13 1998
W98-7134 (4)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

T 204 1 (Single Sheets) 205 1 (Padded)

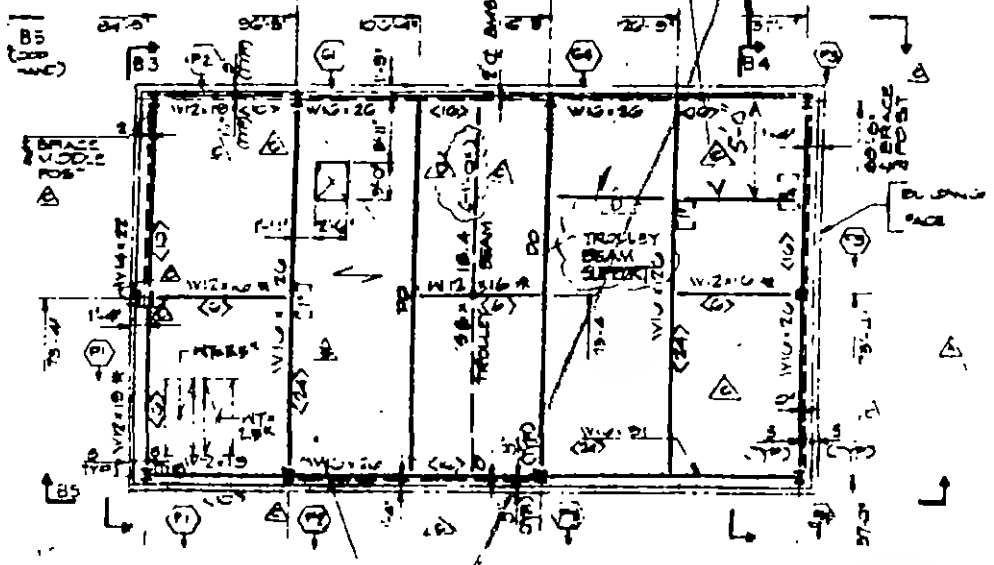
76

THE PORT AUTHORITY OF N
ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS

NOV 13 1998
W98-7134 (4)

RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

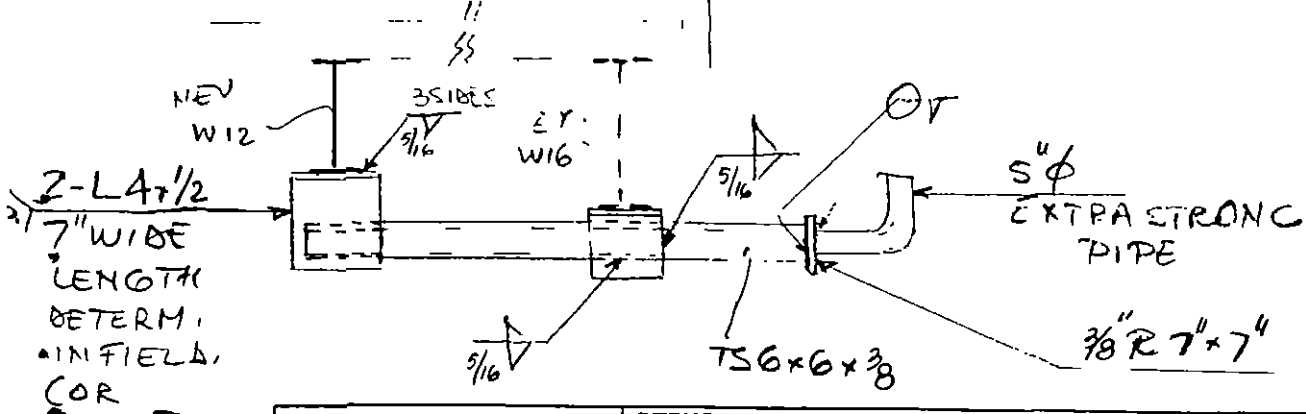
NEW W12+19 PLACED TIGHT TO UNDERSIDE OF EXIST. SLAB - SHIM AS REQ'D



SLAB REINF BETWEEN BOTT (PLACE MAIN REINF IN BOTT OF RIB)

ROOF BULKHEAD FRAMING PLAN

EDGE OF EXIST. PARAPET



CANTOR SEINUK GROUP, PC

CONSULTING ENGINEERS
600 MADISON AVENUE
NEW YORK, NEW YORK 10022

STRUCTURE OEM
7WTC

SUBJECT ROOF - ANTENNA SUPPORT

ARCHITECT SHCA

DATE 10/20/98

SK. S-RA

OFFICE COPY

3

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

M E M O R A N D U M

To: Ms. Teresa Koebel, Manager, World Trade Project Management
From: C. John Lin, P.E.
Date: October 16, 1998
Subject: **WTC - ALTERATION APPLICATION W98-7134 - 7 WTC - MAYOR'S EMERGENCY MANAGEMENT OFFICE**

Reference: Review Request dated September 25, 1998.

Copy To:

J. Castaldo	J. Napolitano	Job Folder
A. Fadavi	K. Piatt	Chrono Folder
L. Menno	R. Rafferty	

A review of the material submitted with the referenced request has been made.

The previous recommendation of approval to proceed with construction remains unchanged subject to the submission of the items listed below being revised in accordance with the seven (7) requirements listed on the attached rider.

Drawings: Specifications: Calculations:

REMARKS: 1) See the attachment for a revised list of drawings recommended for approval.

2) This memorandum was transmitted to the Facility via OA on October 16, 1998.

C. John Lin, P.E.
Manager
Quality Assurance Division

I.D.:W98-7134-003
MP/lm

Att.

Reviewers:
M. Palmieri, Coordinator & Architectural; A. Rohssler, Electrical; O.M. Clemente, Mechanical; H. MacDonald, Plumbing; V. Tsin, Structural; D. Luey, Fire Protection.

RIDER

ALTERATION APPLICATION W-987134

ARCHITECTURAL

1. Drawing A-23-1 and A-23-5. The response to Comment 2.b of the previou rider is noted; however, Door 3 is in a two-hour rated wall. The door is not rated and will not maintain the integrity of the fire partition. Please provide a fire rated door as required. (Modified repeat comment)

ARCHITECTURAL AND ELECTRICAL

2. Doors 40A and 40B. The response to the previous Rider Comment 6, and the 6/1/98 letter, J. Aliotta to J. Gertler, requesting reconsideration of previous Rider Comment 6 on locked doors in the path of egress, are acknowledged. The access control system does require either BS&A or MEA approval. See NYC Building Code Section 27-131. Note that any system that connects to the fire alarm system must preserve the integrity of the fire alarm system. As the proposed access control system does not have New York City approval, it cannot be accepted. It is suggested that the manufacturer applies to the MEA Division of the NYC Building Department for approval of the access control system and submit to them the UL information as the basis for obtaining the MEA approval. (Modified Repeat Comment)

STRUCTURAL

3. Drawing A-1-1, Detail 10. Indicate the weight of the oil drum and submit details of its connection to the floor above.

4. Drawing D-6, Detail 10. Please verify that it is required to remove the existing column and cross bracing as per note on the detail. Note that work is not shown on structural drawings and no supporting calculations are provided.

5. Regarding the response to Comment 15 of the previous Rider, please note that the weight and location of each piece of machinery and equipment, such as fuel tank, weighing more than one thousand pounds shall be actually shown on the drawings. Making such a statement in the note on the drawings is not sufficient. See Code Section 27-135(b)(3). (Modified Repeat Comment)

6. Calculations

   a) Design of 23rd Floor Framing. The total dead load on the beams (see sheets 27, 31, 36, 35c.) is 90 psf, as per Loading Criteria, Sheet 1, whereas in Calculations it is taken as 75 psf. Please revise.

b) Sheets 22 and 22A. The shear design of the existing first floor slab to support the new Fuel Oil tank construction and to accommodate the new trenches is noted. Indicate on the drawings the existing slab construction and verify with calculations that the bending stresses in the existing slab are not exceeded.

c) Sheet 27

i) The live load on both sides of files shall be included.

ii) Verify that the existing connections are not overstressed under the added loads.

d) Sheets 31 and 36:

i) The weight of library shelving shall be taken as 46 pcf plus weight of the shelves.

ii) The live load in the library Reading Room shall be 60 psf, not 50 psf as in the Calculations.

e) Sheet 59. Use the actual live load for Radio Room floor instead of 30 psf snow load used in the original calculations.

f) Sheet 64

i) Verify that the total reaction from 16 feet antenna on the supporting structure is 30 lbs as per calculations. Submit data from the manufacturer.

ii) The length of the antenna support is 3 feet as per Detail on Drawing S-5, whereas in the Calculations the same length is only 1.5 feet. Please reconcile.

FIRE PROTECTION

7. General Comment in the response to the previous comments states the Televator storage room is protected by a high hazard sprinkler system as shown on Reference Drawing FP1.01. As per NYC Building Code reference standard RS17-2 (1989 edition NFPA 13) the protection area per high hazard sprinkler shall not exceed 100 sq. ft. The drawing shows a maximum protection area per sprinkler of 168 sq. ft. Please revise to comply.

ATTACHMENT

ALTERATION APPLICATION W-987134

Subject to compliance with the requirements listed in this memorandum's rider, the following is a revist list of drawings recommended for approval. All changes from the previous list are shown in boldface:

Drawing		
T-1	revised	9/25/98
A-EG-23	revised	9/25/98
A-1-1	revised	9/25/98
A-7-1	revised	7/24/98
A-23-1	revised	9/25/98
A-23-2	revised	7/24/98
A-23-3	revised	9/25/98
A-23-4	revised	9/25/98
A-23-5	revised	5/04/98
A-23-6	revised	5/04/98
A-48-1	revised	5/04/98
D-0	revised	9/25/98
D-1	revised	9/25/98
D-2	revised	7/24/98
D-3	revised	5/04/98
D-4	revised	9/25/98
D-5	revised	5/04/98
D-6	revised	7/24/98
D-7	revised	7/24/98
D-8	revised	5/04/98
D-9	revised	7/24/98
D-10	revised	9/25/98
D-11	revised	7/24/98
D-12	revised	5/04/98
D-13	revised	9/25/98
Workstation Plan	revised	5/04/98
Panel/Energy Plan	revised	5/04/98
M1.01	revised	9/25/98
M1.07	revised	9/25/98
M1.23	revised	9/25/98
M4.01	revised	9/25/98
E0.01	revised	5/15/98
E1.01	revised	9/25/98
E1.07	revised	7/24/98
E1.48	revised	5/04/98
E6.01	revised	5/04/98
E6.02	revised	5/04/98
E2.23	revised	9/25/98
E3.01	revised	9/25/98
E4.01	revised	9/25/98

ALTERATION APPLICATION M-987134 (CONT'D.)

Drawing		
E4.02	revised	9/25/98
E4.03	revised	9/25/98
P1.01	revised	5/13/98
P2.07	revised	5/13/98
P3.23	revised	9/25/98
P4.23	revised	9/25/98
P5.23	revised	5/13/98
FP1.01	revised	9/25/98
FP2.07	revised	5/13/98
FP3.23	revised	5/15/98
FP4.23	revised	9/25/98
FP5.23	revised	5/15/98
FP6.23	revised	5/13/98
TC-101	revised	5/13/98
S-1	revised	9/25/98
S-2	revised	9/25/98
S-3	revised	9/25/98
S-4	revised	9/25/98
S-5	revised	9/25/98
038Z001	revised	7/24/98
038L005	revised	5/15/98
038L002	revised	7/24/98
038L003	revised	7/24/98
H5	dated	3/08/98
AV-1	revised	5/04/98
AV-2	revised	5/04/98
AV-3	revised	5/04/98
AV-4	revised	5/04/98
AV-E0	revised	5/04/98
AV-E1	revised	7/24/98
AV-E2	revised	5/04/98
AV-E3	revised	5/04/98
AV-E4	revised	5/04/98
AV-E5	revised	5/04/98
AV-S1	revised	5/04/98
AV-S3	revised	5/04/98
AV-S2	revised	5/04/98
AV-S4	revised	5/04/98
AV-S5	revised	5/04/98
AV-S6	revised	7/24/98
AV-S7	revised	7/24/98
AV-S8	revised	5/04/98
TC-100	revised	5/04/98
TC-101	revised	9/25/98
TC-103	revised	5/04/98
TC-103A	revised	5/04/98
TC-103B	revised	5/04/98

SWANKE HAYDEN CONNELL ARCHITECTS

Fax Message

To: Mr. Jeffrey Gertler
Port Authority of NY & NJ

From: Joseph J. Aliotta

Fax: (212) 435-8168

Job: 5576A

Date: 09-28-98 12:25 AM Pages: 2

Message:

Re: Mayor's Office of Emergency Management
7 World Trade Center
New York, New York
TAA No. 987.134
"Response to PA Attachment B List of Comments-Submission #2-Conditional Approval"

OFFICE COPY

Per your request for clarification, drawing H-5 by GC Wang & Associates is submitted in response to PA Comment # 11. Please refer to the attached page 4 of SHCA Memo dated 09-25-98 for the specific information.

Should you have any questions, please call.

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS
SEP 28 1998
W98-7134 (3)
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TENANT CONSTRUCTION REVIEW UNIT

TAA #987.134

Ron

Per your request why drawing H-5 from GC Wang & Associates is being submitted with this TAA # 987.134. Question #11 requested this information and in the response, the Architect states the drawing is enclosed.

9. Drawings E3.01 and E4.03, regarding system grounding for the UPS and transformer secondary windings. The response to the previous Rider, Comment 16 is noted. However, the details on Drawing E4.03, requiring sizing "per NYC Electrical Code" are not sufficient. Summit the actuarial conductor sizes. See NYC Electrical Code Sections 27-3105-b.3 and 27-3110, Table 1. (Modified repeat comment)

Response:	See attached drawings E-3.01 and S4.03.

MECHANICAL

10. Drawing M1.01, Fuel Piping Schematic. Revise the note to require that the conduit enclosing the fuel oil piping (in the floor trench) shall be 10 gauge steel, two sizes larger than the fuel pipe in it, as required by Code Section 27-829(f)92. (Repeat comment)

Response:	Note is added to revised Drawing M1.01.

11. Drawings M1.01 and M1.07. Clarify whether the existing risers being utilized for new fuel oil lines is schedule 40 seamless steel and enclosed exclusively, containing no other pipes or ducts, in a shaft constructed of 4-inch concrete or masonry. The shaft shall be provided with a drainpipe at its base that leads to an open sight drain or open sump. See Code Section 27-829(f). Submit the appropriate documentation. (Repeat comment)

Response:	Per your request, attached to the reissued set of drawings is drawing H-5 by GC Wang & Associates with specification sections indicating the design and construction of the existing risers as previously approved under TAA # 947176. This information is submitted "for reference only" since it was previously approved and installed.

12. Drawing M1.07. Discharge plenum and/or opening for the internal combustion engines exhaust creates a fire hazard conditions in conjunction with the location of the fuel oil vent. Relocate the fuel oil vent outside of the engine exhaust plenum. (Repeat comment)

Response:	The fuel oil is located outside of the generator exhaust plenum on revised Drawing M1.07 as requested and as reviewed at our PA meeting on 5/29/98.

13. Drawing M1.23. Provide index for ventilation for each room or space as required by the Code, Section 27-182(a)(3). Expand the ventilation schedule to include each occupiable room or spaces as required by the Code. (Repeat Comment)

Response:	Drawing M1.23is revised to include the index for ventilation for each room and [illegible] conformance to NYC Building Code Section 27-182(a)(3).

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THE PORT AUTHORITY OF N.Y.
ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS

Swanke Hayden Connell Ltd./Swanke Hayden Connell & Partners LLP
295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0039

SEP 28 1998
W98-7134 (B)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

The Port Authority of NY & NJ

To: Mario Palmieri
From: Danny Luey
Date: October 7, 1998

Subject: Tenant Alterations Review Request
Application No. W98-7134 #3
Fire Protection Comments

There are no fire protection comments.

Note: General Comment in response states the Televator storage room is protected by a high hazard sprinkler system as shown on Reference Drawing FP1.01. NYC Building Code reference standard RS17-2 (1989 edition NFPA 13) states the protection area per high hazard sprinkler shall not exceed 100 sq ft. The drawing shows a maximum protection area per sprinkler of 168 sq ft.

THE PC AUTHORITY OF NEW YORK AND NEV. RSERY

XAP 10/16

TENANT ALTERATION APPLICATION REVIEW REQUEST

DISTRIBUTION		
o	To	Facility
5	QAD	51 N
	D. Warren	PATC ZIP43
	~~G.P. Chiao~~	~~88-S~~
	~~G. Daly~~	~~88-S~~
	~~S. Batra~~	~~2WTC 37FL~~
	~~C. Bonacci~~	~~2WTC 35FL~~
	~~B. Brown~~	~~88-S~~
	~~C. Comair~~	~~2WTC 35-N~~

Facility 1 WTC FLR _____ TAA No. 987134 Date 9/25/98

Application / Tenant MAYOR'S OFFICE

Consultant SWANKE HAYDEN CONNELL

Estimated Cost $10,000,000 Submittal No. 3

Description of Work

BUILDOUT OF TENANT SPACE

Please review the attached (revised) application and send comments to:

Name JEFFREY GERTLER

Location: 1 WTC - 88 - South Phone: 435-4531

10/9/98 DUE DATE

DESIGN DISCIPLINES

- Architectural
- Egress Analysis
- Structural
- HVAC
- Plumbing
- Sprinkler
- Electrical
- Utility > 600 V
- Civil
- Geotechnical
- Environmental
- Fueling
- Radio Freq. Coord.
- Corrosion Protection
- Elevator / Escalator
- Other_____

ATTACHMENTS

- ☐ Document List
- ☐ Contract Drawings
- ☐ Contract Specifications
- ☐ Tenant Response
- ☐ Computations
- ☐ Reports
- ☐ Catalog Cuts
- ☐ Other

Special Instructions

DESCRIPTION

OFFICE COPY

THE PORT AUTHORITY OF N.Y.
ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS

SEP 28 1998
W98-7134 (3)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW

Copy To: J. Napolitano, L. MENNO

_____(Proj. Mgr.)

Jeffrey Gertler
Signature

form:gertler/TAA/review revised 8/11/98

THE PO[illegible] AUTHORITY OF NEW YORK AND NE[illegible]ERSERY

TENANT ALTERATION APPLICATION REVIEW REQUEST

DISTRIBUTION		
No	To	Facility
	QAD	51 N
	D. Warren	PATC ZIP43
	S.P. Chiao	88-S
	G. Daly	88-S
	S. Batra	2WTC 37FL
	C. Bonacci	2WTC 35FL
	B. Brown	88-S
	C. Semah	2WTC 35-N

Facility_____ FLR_____ TAA No 987.134 Date 9/24/98

Application / Tenant MAYOR'S OFFICE

Consultant_____

Estimated Cost_____ Submittal No._____

Description of Work

Please review the attached (revised) application and send comments to:

Name JEFFREY GERTLER

Location: 1 WTC - 88 - South Phone: 435-4531

__/__/__ DUE DATE

DESIGN DISCIPLINES

-] Architectural
-] Egress Analysis
-] Structural
-] HVAC
-] Plumbing
-] Sprinkler
-] Electrical
-] Utility > 600 V
-] Civil
-] Geotechnical
-] Environmental
-] Fueling
-] Radio Freq. Coord.
-] Corrosion Protection
-] Elevator / Escalator
-] Other_____

ATTACHMENTS

- ☐ Document List
- ☐ Contract Drawings
- ☐ Contract Specifications
- ☐ Tenant Response
- ☐ Computations
- ☐ Reports
- ☐ Catalog Cuts
- ☐ Other

DESCRIPTION

Special Instructions

REQUESTING REVIEW BY APPOINTMENT FOR MONDAY SEPT 28

Copy To: J. Napolitano,

_____(Proj. Mgr.)

_____ Signature

_____

form:gertler/TAA/review revised 8/11/98

SWANKE HAYDEN CONNELL ARCHITECTS

Fax Message

To: Mr. Jeffrey Gertler
Port Authority of NY & NJ

From: Joseph J. Aliotta

Fax: (212) 435-8168

Job: 5576A

Date: 09-18-98 11:00 AM Pages: 9

Message:

Re: Mayor's Office of Emergency Management
7 World Trade Center
New York, New York
TAA No. 987.134
"Response to PA Attachment B List of Comments-Submission #2-Conditional Approval"

SHCA requests a review by appointment for the above referenced project to respond to comments attached to Mr. Gerard Gaeta's letter dated May 20, 1998.

SHCA requests the review date to be Monday, September 28, 1998 if possible.

SHCA will forward revised drawings and specifications to your attention by 12:00 noon of Friday, September 25, 1998.

Attached please find the list of drawings and specification table of contents for the submission. As requested by the PA, SHCA will re-issue all drawings/specifications to avoid culling approved sets of drawings for use in the field. Those drawings with revision date of 09-25-98 are issued in response to the Submission # 2 comments as well as additional revisions made at the client's request and some required coordination.

Please confirm the total number sets you require including the 3 sets that are required to be signed and seal. SHCA will proceed with 13 sets per previous submissions unless directed otherwise from you.

We apologize for the unavoidable length of time required to resubmit to the PA in response to your comments.

Should you have any questions, please call.

Cc: J. Mejia-SHCA
W. Weems-Silverstein (732-5190)

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PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS
SEP 28 1998
W98-7134 (3)
RECEIVED
ALTERATIONS APPLICATION
CONSTRUCTION REVIEW UNIT

\\NEWYORK04\PROJECTS\5576\AIO\[illegible]

SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York

SHCA Project No. 5576A
Date: September 25, 1998

LIST OF DRAWINGS
Issued for P. A. Approval

THE PORT AUTHORITY OF N Y
ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS

SEP 28 1998
W98-7134 (B)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

DRAWING NUMBER	DRAWING TITLE	ISSUE DATE
Architectural		
T-1	TITLE SHEET	9/25/98
A-EG-23	23RD FLOOR EGRESS PLAN	9/25/98
A-1-1	PART 1ST FLOOR CONSTRUCTION PLAN	9/25/98
A-7-1	PART 7TH FLOOR CONSTRUCTION PLAN	5/4/98
A-23-1	23RD FLOOR PARTITION PLAN	9/25/98
A-23-2	23RD FLOOR REFLECTED CEILING PLAN	5/4/98
A-23-3	23RD FLOOR POWER, TELEPHONE AND EQUIPMENT PLAN	9/25/98
A-23-4	POWER AND TELEPHONE LOCATION PLAN	9/25/98
A-23-5	FINISH PLAN	5/4/98
A-23-6	FURNITURE PLAN	5/4/98
A-46-1	PART ROOF / RADIO ROOM CONSTRUCTION PLAN	5/4/98
D-0	PARTITION TYPES, DOOR TYPES & DETAILS	9/25/98
D-1	NEW BATHROOMS & PANTRIES PART PLANS, ELEVATIONS AND DETAILS	9/25/98
D-2	ELEVATIONS & MILLWORK SECTIONS & DETAILS	5/4/98
D-3	A/V ENCLOSURES ELEVATIONS AND DETAILS	5/4/98
D-4	ELEVATIONS AND DETAILS	9/25/98
D-5	ELEVATIONS & DETAILS	5/4/98
D-6	DETAILS	5/4/98
D-7	DETAILS	5/4/98
D-8	DETAILS	5/4/98
D-9	DETAILS	5/4/98
D-10	PART PLAN AND DETAILS	9/25/98
D-11	EOC WORK STATION DETAILS	5/4/98
D-12	TYPICAL - EXTERIOR DETAIL	5/4/98
D-13	DETAILS	9/25/98
BFI Furniture Drawings		
	WORK STATION PLAN 23RD FLOOR	5/4/98
	ENERGY / PANEL PLAN 23RD FLOOR	5/4/98

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Swanke Hayden Connell Ltd. / Swanke Hayden Connell Partners LLP
295 Lafayette Street, New York, New York10012
212 226-9696, Fax 212 219-0059

SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York

SHCA Project No. 5576A
Date: September 25, 1998

LIST OF DRAWINGS

Issued for P. A. Approval

DRAWING NUMBER	DRAWING TITLE	ISSUE DATE
Mechanical		
M1-01	1ST FLOOR HVAC PLAN	9/25/98
M1-07	7TH FLOOR HVAC PLAN	9/25/98
M1-23	23RD FLOOR HVAC PLAN	9/25/98
M4-01	ROOF PART PLAN, NOTES AND DETAILS	9/25/98
Electrical		
E-001	SYMBOL LIST	5/15/98
E-1.01	1ST FLOOR PLAN	9/25/98
E-1.07	7TH FLOOR PLAN, LIGHTING, POWER & SIGNAL	5/15/98
E-1.23	23RD FLOOR PLAN - POWER & SIGNAL PLAN	9/25/98
E-2.23	23RD FLOOR PLAN - LIGHTING	9/25/98
E-1.48	ROOF PLAN	5/4/98
E-3.01	POWER RISER DIAGRAM	9/25/98
E-4.01	SCHEDULE & DETAIL SHEET #1	9/25/98
E-4.02	SCHEDULE & DETAIL SHEET #2	9/25/98
E-4.03	SCHEDULE & DETAIL SHEET #3	9/25/98
E-6.01	MOTOR LIST	5/4/98
E-6.02	MOTOR NOTES	5/4/98
Plumbing		
P1.01	PLUMBING 1ST FLOOR PLAN	5/13/98
P2.07	PLUMBING 7TH FLOOR PLAN	5/13/98
P3.23	PLUMBING 23RD FLOOR PLAN	9/25/98
P4.23	PLUMBING NOTES, SCHEDULES, KEY OF SYMBOLS & LIST OF DRAWINGS	9/25/98
P5.23	PLUMBING RISER DIAGRAMS	5/13/98
Fire Protection		
FP1.01	FIRE PROTECTION 1ST FLOOR PLAN	9/25/98
FP2.07	FIRE PROTECTION 7TH FLOOR PLAN	5/13/98
FP3.23	FIRE PROTECTION 23RD FLOOR PLAN	5/15/98
FP4.23	FIRE PROTECTION PRE-ACTION NOTES, SCHEDULES & DETAILS	9/25/98
FP5.23	FIRE PROTECTION SPECIFICATIONS, NOTES, KEY OF SYMBOLS, SCHEDULE & LIST OF DRAWINGS	5/15/98
FP6.23	FIRE PROTECTION RISER DIAGRAM	5/13/98

SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
7 World Trade Center
New York, New York

SHCA Project No. 5576A
Date: September 25, 1998

LIST OF DRAWINGS
Issued for P. A. Approval

DRAWING NUMBER	DRAWING TITLE	ISSUE DATE
Structural		
S-1	1ST FLOOR FARMING PLAN	9/25/98
S-2	7TH FLOOR FARMING PLAN	9/25/98
S-3	23RD FLOOR FARMING PLAN	9/25/98
S-4	ROOF PART FARMING PLAN	9/25/98
S-5	SECTIONS	9/25/98
Audio / Visual		
AV-1	23rd FLOOR EMERGENCY OPERATIONS CENTER A/V FACILITIES PLANS	5/4/98
AV-2	23rd FLOOR MAYOR'S / COMMISSIONER'S SUITES A/V FACILITIES PLANS	5/4/98
AV-3	23rd FLOOR A/V FACILITIES PLANS WATCH COMMAND / PRESS ROOM	5/4/98
AV-4	23rd FLOOR A/V FACILITIES PLANS PIU / TRAINING ROOM	5/4/98
AV-E0	23rd FLOOR A/V ELECTRICAL SYMBOLS A/V ELECTRICAL	5/4/98
AV-E1	23rd FLOOR EMERGECNY OPERATIONS CENTER A/V ELECTRICAL PLANS	5/15/98
AV-E2	23rd FLOOR MAYOR'S / COMMISSIONER'S SUITES A/V ELECTRICAL PLANS	5/4/98
AV-E3	23rd FLOOR WATCH COMMAND / PRESS ROOM A/V ELECTRICAL PLANS	5/4/98
AV-E4	23rd FLOOR PIU / TRAINING ROOM ELECTRICAL PLANS	5/4/98
AV-E5	23rd FLOOR A/V HEAD END SIGNAL DISTRIBUTION COAXIAL CABLE BACKBONE	5/4/98
AV-S1	23rd FLOOR OPERATIONS CENTER RGB / VIDEO FUNCTIONAL DIAGRAM	5/4/98
AV-S2	23rd FLOOR MAYOR'S CONFERENCE ROOM RGB / VIDEO FUNCTIONAL DIAGRAM	5/4/98
AV-S3	23rd FLOOR MASTER AUDIO SYSTEM FUNCTIONAL DIAGRAM	5/4/98
AV-S4	23rd FLOOR PIU / TRAINING ROOM RGB / VIDEO / AUDIO FUNCTIONAL DIAGRAM	5/4/98
AV-S5	23rd FLOOR MAYOR'S / COMMISSIONER'S SUITES AUDIO FUNCTIONAL DIAGRAM	5/4/98
AV-S6	PRESS FEED SYSTEM DISTRIBUTION AUDIO / VIDEO FUNCTIONAL DIAGRAM	5/4/98
AV-S7	RF DISTRIBUTION / HEAD END SYSTEM	5/4/98
AV-S8	23rd FLOOR MASTER CONTROL SYSTEM, CONTROL SYSTEM FUNCTIONALITY	5/4/98
Telecommunications		
TC-100	GENERAL NOTES AND SYMBOLS	5/4/98
TC-101	TELECOMMUNICATIONS PATHWAYS SCHEMATIS	9/25/98
TC-103	TELECOMMUNICATIONS CABLE DISTRIBUTION PATHWAY	5/4/98
TC-103A	TECHNOLOGY ROOM DETAILS	5/4/98
TC-103B	TELECOMMUNICATIONS OUTLET LOCATIONS	5/498

SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York

SHCA Project No. 5576A
Date: September 25, 1998

LIST OF DRAWINGS

Issued for P. A. Approval

DRAWING NUMBER	DRAWING TITLE	ISSUED
Security		
038Z001	RISER DIAGRAM	5/15/98
038L002	SECURITY EQUIPMENT LOCATION	5/15/98
038L003	SECURITY EQUIPMENT DETAILS	5/15/98
038L005	SECURITY EQUIPMENT CONSOLE	5/15/98
Ref. Drawings		
H-5	HVAC PART PLANS, FUEL OIL DISTRIBUTION DIAGRAMS AND DETAILS (AS BUILT)	3/8/95

SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York 10048

SHCA Project No. 5576A
September 25,1998

Specification Table of Contents
Issued for P. A. Approval

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS
SEP 28 1998
W98-7134 (3)
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SECTION NO.	SPECIFICATION SECTION	ISSUE DATE
ARCHITECTURAL		
DIVISION 1	GENERAL REQUIREMENTS	
01010	Summary of Work	4/6/98
01020	Allowances	4/6/98
01030	Alternates	4/6/98
10140	Coordination	4/6/98
01045	Cutting and Patching	4/6/98
01200	Project Meetings	4/6/98
01300	Submittals	4/6/98
01400	Quality Control	4/6/98
10421	Reference Standards and Definitions	4/6/98
01500	Construction Facilities and Temporary Controls	4/6/98
01600	Materials and Equipment	4/6/98
10631	Substitutions	4/6/98
01700	Contract Closeout	4/6/98
DIVISION 2	SITE CONSTRUCTION	
02070	Selective Demolition	4/6/98
DIVISION 3	CONCRETE	
03300	Cast-In-Place Concrete	4/6/98
DIVISION 4	MASONRY	
04200	Unit Masonry	4/6/98
DIVISION 5	METALS	
05120	Structural Steel	4/6/98
05500	Metal Fabrications	4/6/98
05550	Sheet Metal Fabrications	4/6/98
DIVISION 6	WOOD AND PLASTICS	
06100	Rough Carpentry	4/6/98
06400	Architectural Woodwork	4/6/98
DIVISION 7	THERMAL AND MOISTURE PROTECTION	
07110	Sheet Waterproffing	4/6/98
07255	Fireproof Patching	4/6/98

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295 Lafayette Street, New York, New York10012
212 226-9696, Fax 212 219-0059

SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York 10048

SHCA Project No. 5576A
September 25,1998

Specification Table of Contents
Issued for P. A. Approval

SECTION NO.	SPECIFICATION SECTION	ISSUE DATE
07270	Firestopping	4/6/98
07410	Metal Wall Panels	4/6/98
07510	Membrane Roofing and Repairs	4/6/98
07600	Flashing and Sheet Metal	4/6/98
07900	Joint Sealants	4/6/98
DIVISION 8	DOORS AND WINDOWS	
08000	Door Schedule	9/25/98
08110	Steel Doors and Frames	4/6/98
08210	Wood Doors	4/6/98
08305	Access Doors	4/6/98
08450	Interior Metal and Glass Partitions	4/6/98
08710	Door Hardware	9/25/98
08800	Glass and Glazing	4/6/98
DIVISION 9	FINISHES	
09255	Gypsum Board Assemblies	4/6/98
09310	Tile	4/6/98
09511	Acoustical Panel Ceilings	4/6/98
09516	Metal Ceilings	4/6/98
09520	Fabric Wrapped Panels	4/6/98
09525	Fiberglass Composite Ceilings	4/6/98
09600	Interior Stonework	4/6/98
09651	Resilient Flooring	4/6/98
09680	Carpet	4/6/98
09690	Carpet Tile	4/6/98
09700	Resinous Flooring	4/6/98
09900	Painting	4/6/98
09950	Wall Coverings	4/6/98
DIVISION 10	SPECIALTIES	
10100	Visual Display Boards	4/6/98
10165	Toilet Compartments	4/6/98
10270	Access Flooring	4/6/98
10522	Fire Extinguishers and Cabinets	4/6/98
10650	Operable Partition System	4/6/98
10800	Toilet and Bath Accessories	4/6/98

SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York 10048

SHCA Project No. 5576A
September 25,1998

Specification Table of Contents
Issued for P. A. Approval

SECTION NO.	SPECIFICATION SECTION	ISSUE DATE
10900	Miscellaneous Accessories	4/6/98
DIVISION 11	EQUIPMENT	
11020	Security	4/6/98
11130	Audio Visual Equipment	4/6/98
11450	Pantry Equipment	4/6/98
DIVISION 12	FURNISHINGS	
12500	Window Treatment	4/6/98
DIVISION 13	SPECIAL CONSTRUCTION	
Not Required		
DIVISION 14	CONVEYING SYSTEMS	
Not Required		
HVAC		
15100	GENERAL	4/6/98
15110	PIPING SYSTEMS	4/6/98
15120	AIR DISTRIBUTION SYSTEMS	4/6/98
15130	INSULATION	4/6/98
15140	ACOUSTICAL TREATMENT & VIBRATION ISOLATION	4/6/98
15150	CONTROLS & INSTRUMENTATION	4/6/98
15190	MISCELLANEOUS	4/6/98
15310	FIRE PROTECTION PIPING	4/6/98
15330	FIRE PROTECTION INDEX	4/6/98
15330	STANDPIPE AND SPRINKLER SYSTEMS AND EQUIPMENT	4/6/98
15340	PREACTION & MISCELLANEOUS SPRINKLER SYSTEMS	4/6/98
15400	PLUMBING INDEX	4/6/98
15410	PLUMBING PIPING	4/6/98
15440	PLUMBING FIXTURES AND EQUIPMENT	4/6/98
15445	PLUMBING PUMPS	4/6/98
15450	INSULATION FOR PLUMBING	4/6/98
15486	FOUNDATIONS, VIBRATION ISOLATION, & SUPPORTS FOR RIGIDLY SUPPORTED EQUIPMENT (SEISMIC DESIGN)	4/6/98
15991	TESTING OF SYSTEMS	4/6/98
15996	MISCELLANEOUS PLUMBING SYSTEMS	4/6/98

SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York 10048

SHCA Project No. 5576A
September 25,1998

Specification Table of Contents
Issued for P. A. Approval

SECTION NO.	SPECIFICATION SECTION	ISSUE DATE
SUPPLEMENT TO HVAC SPECIFICATIONS- (Sections 15120,15160,15190) - 3 PGS. TOTAL		5/15/98
SUPPLEMENT TO FIRE PROTECTION SPECIFICATIONS- (Sections 15305,15310,15330 15340) - 2 PGS. TOTAL		5/15/98
ELECTRICAL		
16050	Basic Materials, Methods and Requirements	4/6/98
16400	Service and Distribution (REVISED 16400-29 & 16400-33)	9/25/98
16500	Lighting	4/6/98
16600	Special Systems	4/6/98
16700	Communications	4/6/98
TELECOMMUNICATIONS		
17600	Telecommunications Cable Tray Specifications	4/6/98
17600A	Copper Telecommunications Cable Plant Specification	4/6/98
17600B	Copper and Fiber Optic Telecommunications backbone Cable Plant Specification	5/13/98
17600C	Data, Cable TV and Miscellaneous Systems Infrastructure Specifications	4/6/98
STRUCT'L CALCULATIONS		
	Structural Calculations (PAGES 1-64)	9/25/98
SECURITY		
	REVISED PGS. 38, 47 AND TABLE OF CONTENTS	5/13/98

TENANT ALTERATION PLUMBING REVIEW

The Port Authority of New York & New Jersey . Engineering Department .

APPLICATION & SUBMISSION # W98-7134-003

DUE DATE: **10 / 8 / 98**

COORDINATOR : M. PALMIERI *EXT.:* 8614

FACILITY: 7-WTC

TENANT: MAYORS OFFICE'

CHARGE CODE : W2-987-134

BUILDING CODE: NYCBC

DISCIPLINE: PLUMBING

REVIEWED BY: V. FIORE *EXT.:* 7466

DATE: 10 / 7 / 98

COMMENTS:

NO COMMENTS

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY
ENGINEERING DEPARTMENT - DESIGN DIVISION TAA REVIEW REQUEST

D. LUEY (745)
To: H. MAC DONALD (745) (Reviewer) Location: _____

From: QAD DESIGN STANDARDS Date: 10/2/98

TAA # W98-7134-003 Facility: 7WTC

Tenant: MAYOR'S OFFICE (Submission #) Rec'd. Date: 9/28/98

Description of Work: EMERG. MNGMNT. OFFICE

Charge Code: W2-X-X-987.134

Review Disciplines

- ☐ Architectural
- ☐ Structural
- ☐ HVAC
- ☐ Plumbing
- ☐ Fire Protection/ Sprinklers/Etc.
- ☐ Electrical/Metering
- ☐ Utility> 600 V/ 5 KV
- ☐ Civil
- ☐ Geotechnical
- ☐ Environmental/Asbestos Abatem't.
- ☐ Fueling
- ☐ Radio Frequency Coordination
- ☐ Corrosion Protection
- ☐ Elevator/Escalator
- ☒ Traffic
- ☐ Other(specify)_____

Attachments

- ☐ Document List
- ☒ Contract Drawings
- ☐ Contract Specifications
- ☒ Tenant Response
- ☐ Calculations
- ☐ Catalog Cuts
- ☐ Reports
- ☐ Certifications
- ☐ Previous Rider
- ☐ Other (specify)_____

Special Instructions

Reviewer Information

Name Danny Luey
Date started October 6, 1998
Date completed October 7, 1998
Review time(days) ___
New comments 0 (1 note)
Repeat comments 0

DUE DATE: 10/8/98

Please notify the COORDINATOR if you cannot complete the review by the due date.

Please review the attached submittal; FAX and send your written comments to the following COORDINATOR:

Name: M. PALMIERI Location: 51N

Phone #:(212) 435-8614 FAX #: (212) 435-2069*

f responding by fax, please advise coordinator in advance at telephone umber indicated.

2

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

M E M O R A N D U M

To: Mr. Lou Menno, General Manager, World Trade Tenant Services
From: C. John Lin, P.E.
Date: May 19, 1998
Subject: **WTC - ALTERATION APPLICATION W-987134 - 7 WTC - MAYOR'S EMERGENCY MANAGEMENT OFFICE**

Reference: Review Request dated 5/13/98

Copy To: A. Fadavi, G. Gaeta, T. O'Connor, J. Napolitano, Job Folder, Chrono Folder

A review of the material submitted with the referenced request has been made.

The previous recommendation that approval to proceed with construction be withheld, has been changed to recommending that **approval** to proceed with construction be given subject to the **submission** of the items listed below being **revised** in accordance with the **twenty-two (22) requirements** listed on the attached rider.

Drawings: Specifications:

REMARKS: 1) Please inform the tenant in writing that Swanke Hayden Connell Architects, in their 5/13/98 response to previous Electrical Comment 11, referring to Drawing A-1-1, Section 7, advises not to use the space under the fuel storage tank for charging storage batteries.

2) See the attachment for a revised list of drawings recommended for approval.

3) This memorandum was transmitted to the Facility via OA on May 19, 1998.

for Ron Pisapia
C. John Lin, P.E.
Acting Manager
Quality Assurance Division

I.D.: W98-7134-002
HV/al
att.

Reviewers:
H. Vadi, Architectural and Coordinator; A. Rohssler, Electrical; O.M. Clemente, Mechanical; V. Tsin, Structural; H. MacDonald, Fire Protection.

Drawing (cont'd)

FP2.07	revised	5/13/98
FP3.23	revised	5/13/98
FP4.23	revised	5/13/98
FP5.23	revised	5/13/98
FP6.23	revised	5/13/98
TC-101	revised	5/13/98
S-1	revised	5/13/98
S-2	revised	5/13/98
S-3	revised	5/13/98
S-4	revised	5/13/98
S-5	revised	5/13/98
038Z001	revised	5/13/98
038L005	revised	5/13/98
038L002	revised	5/13/98
038L003	revised	5/13/98

ATTACHMENT

ALTERATION APPLICATION W-987134

Subject to compliance with the requirements listed in this memorandum's rider, the following is a revised list of drawings recommended for approval. All changes from the previous list are shown in boldface:

Drawing		
T-1	revised	5/13/98
A-EG-23	revised	5/13/98
A-1-1	revised	5/13/98
A-7-1	revised	5/04/98
A-23-1	revised	5/04/98
A-23-2	revised	5/04/98
A-23-3	revised	5/04/98
A-23-4	revised	5/04/98
A-23-5	revised	5/04/98
A-23-6	revised	5/04/98
A-48-1	revised	5/04/98
D-0	revised	5/04/98
D-1	revised	5/04/98
D-2	revised	5/04/98
D-3	revised	5/04/98
D-4	revised	5/04/98
D-5	revised	5/04/98
D-6	revised	5/04/98
D-7	revised	5/04/98
D-8	revised	5/04/98
D-9	revised	5/04/98
D-10	revised	5/13/98
D-11	revised	5/04/98
D-12	revised	5/04/98
M1.01	revised	5/13/98
M1.07	revised	5/13/98
M1.23	revised	5/13/98
M4.01	revised	5/13/98
E1.01	revised	5/13/98
E1.23	revised	5/13/98
E3.01	revised	5/13/98
E4.01	revised	5/13/98
E4.02	revised	5/13/98
E4.03	revised	5/13/98
P1.01	revised	5/13/98
P2.07	revised	5/13/98
P3.23	revised	5/13/98
P4.23	revised	5/13/98
P5.23	revised	5/13/98
FP1.01	revised	5/13/98

19. Structural Calculations dated May, 1998:

    a) Fuel Tank Framing. Add weight of masonry walls supported on the Mezzanine.

    b) Calculations of the 23rd Floor Construction:

        i) The existing slab design of LAN Room is noted. Submit also the design of the existing framing at this location.

        ii) Submit calculations to verify the adequacy of the floor in the Water Storage Room for 10 feet high stack of bottles, as per note on Drawing S-3.

FIRE PROTECTION

20. Drawing FP4.23, Pre-action Sprinkler System Description and Sequence of Operations (Items 2.B and 3), Pre-action System Assembly Detail, and Pre-action Fire Sprinkler Electrical Control One-Line Rider Diagram. The NYC Fire Department prohibits cross zoning of detectors in preaction systems except where a halon system is also protecting an area identical to that protected by the sprinkler. Revise accordingly.

    Also, revise Note 2(b) under the Pre-action Sprinkler System Description and Sequence of Operation to eliminate cross-zoning of detectors as required by NYC Fire Department.

21. Drawing FP1-01. Sprinkler piping and heads on the first floor under Fuel Tank Storage Room are noted to be installed tight to the wall. Distance form walls to sprinkler shall conform to NFPA #13 4-2.1.5.1 and 4-2.1.5.2.

PLUMBING

22. Drawing P3.23. Provide a drain receptor for the Pre-action valve and assembly as noted on the Pre-action system detail shown on Drawing FP4.23.

12. Drawing M1.07. Discharge plenum and/or opening for the internal combustion engines exhaust creates a fire hazard conditions in conjunction with the location of the fuel oil vent. Relocate the fuel oil vent outside of the engine exhaust plenum. (Repeat comment)

13. Drawing M1.23. Provide index for ventilation for each room or space as required by the Code, Section 27-182(a)(3). Expand the ventilation schedule to include each occupiable room or space as required by the Code. (Repeat comment)

14. Drawing M1.23. Show all the fire dampers, smoke dampers or combination fire/smoke dampers, existing or new, in the ducts that penetrate the new fire rated construction as required by the Code, RS 13-1, Section 3-3.7.2 and the NYC Department of Buildings, Technical Policy and Procedure Notice #6/96. See Drawing A-23-1 for location of all fire rated walls. (Repeat comment)

STRUCTURAL

Comments 30, 32-(a), and 34 of the previous Rider are repeated since no information requested in the original comment was provided:

15. The locations and loads of each piece of machinery and equipment having a weight in excess of one thousand pounds shall be noted on the drawings. Code Section 27-157(b)(3). (Repeat comment)

16. Drawing A-1.1, Trench Note on the Plan and Detail 2. Verify with calculations that the existing construction will not be overstressed due to the new trench cut in the existing slab. (Repeat comment)

17. Drawing A-23-1. Submit calculations to show that the existing construction is not overstressed under the added loads in the new Storage Room 23-24, Libraries 23-28 and 23-18, File Room 23-20, and Vault Room 23-16. (Repeat comment)

18. Please submit the following:

    a) 23rd Floor. Verify that the existing construction is not overstressed under the added weight of operable partitions when they are extended and are retracted in Conference Rooms 23-44 through 23-46.

    b) Submit design of the new Radio Room construction on the existing roof. Also, please verify that the existing roof can support Radio Room loads and snow drifting created by it.

    c) Verify with calculations the design of the new Antenna Support to the existing roof.

W-987134 (cont'd)

c) The response notes that the access control system does not have a BS&A or MEA approval. Therefore, this system cannot be approved. Revise the design accordingly.

d) Submit the actual BS&A approval resolutions that are cited in the response.

(Modified repeat comment)

ELECTRICAL

7. Grounding Conductor Sizes, Specification Pages 16400-29 and 16400-33. Add that the minimum size of grounding conductors shall be as listed in NYC Electrical Code Section 27-3110, Table 1. The response to previous Rider, Comment 12 is noted. However, the revised specifications have not be submitted. (Repeat comment)

8. Drawing TC-101; Scope of Work, Telecommunications Cable Installation, Specification Section 16700B, page 4. Revise so that the communications cable is installed elsewhere than in an electric closet. See NYC Electrical Code Bulletin 119-1970, Section 119.1-b. The response to previous Rider, Comment 13 is noted. However, the revised drawings and specifications continue to show the communications installation in an electric closet. (Repeat comment)

9. Drawings E3.01 and E4.03, regarding system grounding for the UPS and transformer secondary windings. The response to the previous Rider, Comment 16 is noted. However, the details on Drawing E4.03, requiring sizing "per NYC Electrical Code," are not sufficient. Submit the actual conductor sizes. See NYC Electrical Code Sections 27-3105-b.3 and 27-3110, Table 1. (Modified repeat comment)

MECHANICAL

10. Drawing M1.01, Fuel Piping Schematic. Revise the note to require that the conduit enclosing the fuel oil piping (in the floor trench) shall be 10 gauge steel, two sizes larger than the fuel pipe in it, as required by Code Section 27-829(f)92). (Repeat cement)

11. Drawings M1.01 and M1.07. Clarify whether the existing risers being utilized for the new fuel oil lines is schedule 40 seamless steel and enclosed exclusively, containing no other pipes or ducts, in a shaft constructed of 4-inch concrete or masonry. The shaft shall be provided with a drainpipe at its base that leads to an open sight drain or open sump. See Code Section 27-829(f). Submit the appropriate documentation. (Repeat comment)

RIDER

ALTERATION APPLICATION W-987134

ARCHITECTURAL

1. Drawings A-1-1 and D-10. Please verify with an assembly number (for 4-hour rated) for the 6" thick concrete block curb at the rated hatch on the two open sides.

2. Drawings A-23-1 and A-23-5:

   a) Indicate 3/4 hour rating for Doors 55 and 56 in the one-hour rated wall.

   b) Doors 3, 9, 11A, 11B, 14, 35, 38, 42A, 42C, 44, 45, etc., occur in two-hour rated walls. These doors are not rated and will not maintain the integrity of the fire partitions. Please provide rated doors as required.

3. Drawing D-1. The response to Comment 8 of the previous Rider has been noted. Please provide clear maneuvering space of 5' radius, not overlapping the space from the door swing opening. See ADA Section 4.2.3. (Modified repeat comment)

4. Drawing D-0, Card Reader. Submit BS&A or MEA resolution of approval for all card reader devices and locking devices to be installed in all exit doors. See NYCBC Section 27-131. (Repeat comment)

5. Drawings A-1-1 and D-4, Elevation 'C' and 'F'. Please indicate the Glass marking (with height A.F.F) on the glass panel in the elevation, in compliance with BS&A Calendar #501-68-SR.

ARCHITECTURAL AND ELECTRICAL

6. Electrically and electromagnetically locked doors in the path of egress, such as on Vikonics Drawings 038Z001 and 038L003, Doors 40A, 40B, 21C, 05 and 13. The 5/13/98 Swanke Hayden Connell response to the previous Rider, Comment 9 is noted:

   a) The cited exception to Code Section 27-371(j)(1)a, for secure areas, applies only if specifically approved on a reconsideration basis. Submit a request for reconsideration for those areas for which the exception will apply.

   b) The release means for the magnetic locks shall be directly on the door, and shall interrupt the magnetic lock circuit directly, without reliance upon a computer or other unapproved control system. An interposing relay that has been approved for the purpose may be used in the lock circuit, and may be required if the switch contacts are not rated to interrupt the magnetic lock circuit current. The response, that there is a tie-in to the fire alarm system, does not address the problem.

THE P(. AUTHORITY OF NEW YORK AND NE\ ERSEY

TENANT ALTERATION APPLICATION REVIEW REQUEST

DISTRIBUTION		
No	To	Facility
~~5~~	OAD	51 N
1	D. Warren	PATC ZIP43
~~1~~	~~G.P. Ohiso~~	~~88 S~~
~~1~~	~~G. Daly~~	~~88 S~~
~~2~~	~~G. Batra~~	~~2WTC 37FL~~
1	C. Bonacci	2WTC 35FL

Facility 7WTC FLR _____ TAA No. 987134 Date 5/14/98

Application / Tenant MAYOR'S OFFICE

Consultant SWANKE HAYDEN CONNELL

Estimated Cost 10,000,000 Submittal No. 3

Description of Work

BUILDOUT OF TENANT SPACE

Please review the attached (revised) application and send comments to:

Name JEFFREY GERTLER

Location: 1 WTC - 88 - South Phone: 435-4531

5/28/98 DUE DATE

DESIGN DISCIPLINES

- ☐ Architectural
- ☐ Egress Analysis
- ☐ Structural
- ☐ HVAC
- ☐ Plumbing
- ☐ Sprinkler
- ☐ Electrical
- ☐ Utility > 600 V
- ☐ Civil
- ☐ Geotechnical
- ☐ Environmental
- ☐ Fueling
- ☐ Radio Freq. Coord.
- ☐ Corrosion Protection
- ☐ Elevator / Escalator
- ☐ Other_____

ATTACHMENTS

- ☐ Document List
- ☐ Contract Drawings
- ☐ Contract Specifications
- ☐ Tenant Response
- ☐ Computations
- ☐ Reports
- ☐ Catalog Cuts
- ☐ Other

DESCRIPTION

Special Instructions

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV.
DESIGN STANDARDS
MAY 14 1998
IN98-7134 (2)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

OFFICE COPY

Copy To. G. Gaeta, J. Napolitano, E. Monteverde, N. Seliga

J. PICONE (Proj Mgr)

Jeffrey Gertler
Signature

Response to Items Required for Construction Approval

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
7 World Trade Center
New York, New York 10048

Project Number: 5576A

May 13, 1998

ITEM #	REMARK	FIRM RESPONDING

GENERAL

1. General, Drawing T-1. Provide a note regarding Controlled Inspection. All items subject to controlled inspection shall be listed on the plans in compliance with NYC Building Code Sections 27-132, 27-136 and PA Tenant Construction Review Manual (TCRM) 1997, Section 14.III.b.

Response: Will Comply. **SHCA**

ARCHITECTURAL

2. Drawing A-EG-23:
   a) Provide a note that all work shall conform to the latest edition of NYC Building code and requirements of the PANYNJ. See PA Tenant Construction Review Manual, 1997.

Response: Will Comply. **SHCA**

   b) Please add a note regarding construction classification of the building, as per NYC Building Code Section 27-269.

Response: Will Comply. **SHCA**

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Please add the following notes after verification:

   c) The proposed design complies with the requirement of the Federal "American with Disabilities ACT (ADA), PL-101-336".

Response. Will Comply. **SHCA**

   d) All wood & wood products shall be fire retardant and labeled accordingly as per NYC building code Section 27-238.

Response: Will Comply **SHCA**

THE PORT AUTHORITY OF N.Y.
ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS
MAY 14 1998
(W)98-7134 (2)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

Swanke Hayden Connell Ltd./Swanke Hayden Connell & Partners, NSP
295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0052

3. Drawing A-1-1:

a) Provide an approved assembly numbers for the four hour rating for concrete floor, 8" concrete block wall and fireproofing over deck and beams. See NYC Building code Section 27.322.

Response:	**Will Comply. (see dwg.A-1-1 & D-0 note @ partition type "10"**	**SHCA**

b) Provide a rated hatch at the elevated slab to maintain the integrity of the rated construction, as per NYC Building Code Section 27-342.

Response:	**Will Comply. (see dwg. D-10 for2HR. Rated door specification & detail)**	**SHCA**

c) Revise the note at Part Plan - Mezzanine "New full height CMU ($ HRS)" instead of 3 Hrs as stated on the drawing.

Response:	**Will Comply.**	**SHCA**

d) Extend the 4 hour rated wall above the platform, down to the main floor and modify all doors to match the fire rating of the enclosure. Also, all structure members, including columns shall be 4-hour fire rated.

Response:	**Will Comply. (see notes on dwg. A-1-1 re: 3HR rated elevator pit doors and section # 10 for 3HR rated fire shutter.)**	**SHCA**

e) Penetration through rated construction. Please provide on the drawing a detail or note that clearly defines the method by which the fire-rating of construction is maintained when penetrated by ducts, pipes, conducts, etc. as per Code Section 27-343. Please note that responsibility for design or code compliance shall not be delegated to the contractor, as per PA TCRM, Section 3(III).

Response:	**Will Comply. (see revised note # 1)**	**SHCA**

4. Drawing A-7-1. Please provide occupancy group of the space left of the column 19 and right of column 24 and indicate proper fire resistance rating for walls separating these spaces from the Pump and generator Room, as per NYC Building Code Section 27-240 and Table 5-1 or 5-2.

Response:	**Will Comply.**	**SHCA**

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5. Drawings A-23-1 and A-23-5

a) Please separate the Computer Equipment Room form the adjacent area with a one-hour fire resistant partition. See NFPA 75, Chapter 3.

Response:	**Will Comply. (see fire rating next to wall type flag in floor plan and partition types dwg. D-0.)**	**SHCA**

b) All door openings in rated partitions shall be protected with a rated door assembly to maintain the integrity of the fire partition.

Response:	**Will Comply. (see construction plan and door schedule on specification book section 8000.)**	**SHCA**

c) Finish Schedule. Submit specification and MEA or BS&A resolution of approval for the following items, as per NYC Building Code Sections 27-131 and 27-348. Please note that manufacturer's data is not a substitute for a certificate of acceptability:

i. All ceiling tiles
ii. Wall veneer
iii. Faux wood panel
iv. Fabric wall covering and fabric wrapped panels
v. Plastic laminates
vi. Solid surfacing

Response:	**Will Comply. (see added column to finish schedule for B S & A or MEA # wherever possible.)**	**SHCA**

d) Submit test reports for the carpets from an independent registered testing laboratories in compliance with the NYC Building Code Section 27-351(d)(2).

Response:	**Will Comply (see attached.)**	**SHCA**

6. Drawing A-23-2. Please revise the exit sign arrow near Door 37 in Corridor "C", in the direction of exit. See NYCBC Section 27-383.

Response:	**Will Comply.**	**SHCA**

7. Drawing D-0:

a) Card Reader: Submit BS&A or MEA resolution of approval for all card reader devices and locking devices to be installed in all exit doors. See NYCBC Section 27.131.

b) Partition Types. Please provide an approved assembly number for all rated partitions. See NYCBC Section 27-322.

Response:	**Will Comply.**	**SHCA**

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8. Drawing D-1:

a) Please provide clear maneuvering space inside Toilet Rooms 23-31, 23032, and 23-48 so a handicapped person can close the door with minimum effort. See ADA Section 4.2.3.

Response:	**Will Comply. (see revised dwg. #1)**	**SHCA**

b) Revise minimum distance of 15: from wall to center line of lavatory. Comply with ADA Section 4.19.

Response:	**Will Comply.**	**SHCA**

c) Side Grab bar at water closet. Provide 42: long grab bar at side wall, as per ADA Section 4.17.6 and Figure 29.

Response:	**Will Comply. (see accessories schedule item # 10)**	**SHCA**

d) Please provide proper elevations of all fixtures and accessory used by handicapped persons, to comply with ADA Code.

Response:	**Will Comply. (see dwg. D-1 for clearances elevations and plans, also see mounting hts. At accessories schedule.)**	**SHCA**

e) The curb at the handicapped shower stall shall comply with ADA Code Section 4.21.7.

Response:	**Will Comply. (see detail # 7 for HC accessible shower receptor.)**	**SHCA**

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ARCHITECTURAL AND ELECTRICAL

9. Vikonics Drawings 038Z001 and 038L003. Doors 40A, 40B, 21C., 05, and 13 have been identified as having magnetic locks. In coordination with the Architectural design, investigate all electrically operated locks on doors that are in the path of egress, and show that those doors are readily operable, without delay, at all times form the side from which egress is to be made, and shall not require a key, card, or code to operate from that side.

Response:	**Will Comply. (magnetic locks will be revised to electric locks with free egress and fail safe type and tie in to class "E" building alarm system.) (NYC code provides exceptions for secure areas.)** **SHCA**

a) An egress button, such as shown for Door Type D, for example, does not meet the above egress requirement.

Response:	**See response above.** **SHCA**

b) The release means for the magnetic locks shall interrupt the magnetic lock circuit directly, without reliance upon a computer or other unapproved control system. An interposing relay that has been approved for the purpose may be used in the lock circuit, and may be required if the switch contacts are not rated to interrupt the magnetic lock circuit current.

Response: Will Comply. (will tie-in to class "E" fire alarm system.) **SHCA**

c) Also submit the MEA or BS&A approval resolutions covering the components of the locked door system.

Response: Electric locks are Schlage L9080PEU B S & A # 680-85-SA dated 9/20/89
Electromagnetic locks by Von Duprin Inc. B S & A # 1203-88-SA
Access control system does not have a B S & A # or MEA # but it is UL # 249 case # BP4277
SHCA

See NYC Building Code Section 27-371(j)(1)a.

10. Drawing E1.23. Electrically operated locks on elevator vestibule (fire system) doors. Add a break-glass station in the elevator lobby, adjacent to the doors, so as to unlock the elevator lobby vestibule door, thus providing access to an exit stair. The electrically operated lock shall be of the fail-safe type. If, in addition, the tenant has an individual fire alarm panel, then include circuiting that will unlock the elevator vestibule door upon activation of the tenant alarm panel. See NYC Building Code Reference Standard RS 18-1, Rule 110.6.b.

Response:	**Will Comply. (see electrical drawings and hardware schedule on specifications section 8700.)** **SHCA**
Response:	**Drawing E1:23: Drawing is revised to include break-glass stations in elevator vestibules to release vestibule doors upon activation.** **CA**

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ELECTRICAL

11. Drawing A-1-1, Section 7. The space under the fuel oil storage tank may be used for charging storage batteries on an electric vehicle. Show explosion-proof wiring methods, to guard against the accumulation of an explosive mixture of battery gases. The storage batteries can produce explosive gases, even if sealed recombination-type batteries are used. See NYC Electrical Code Section 27-3158, the 11/18/92 minutes of the NYC Electrical Code Revision and Interpretation Committee, NEC Section 480-8(a), and PA Tenant Construction Review manual Section 10-V.D.7.

Response:	**Drawing E.101 is revised to include explosion proof wiring in the space below oil storage tank.** **The space is properly ventilated: If the concern is ignition of accumulated explosive gas, we recommend the space should not be used to charge battery. Spark is created each time contact is made to battery terminal.**	**CA**

12. Grounding Conductor Sizes, Specification pages 16400-29 and 15400-33. Add that the minimum size of grounding conductors shall be as listed in NYC Electrical Code Section 27-3110, Table 1.

Response:	**Grounding conductor size: Added to the specifications on Pages 16400-29 and 16400-33 grounding conductor and bonding jumper in accordance with NYC Electrical Code Section 27-3110, Table 1.**	**CA**

13. Drawing TC-101: Scope of work, Telecommunications Cable Installation, Specification Section 16700B, Page 4. Also, revise the note stating the communications cable is installed elsewhere than in an electric closet. See NYC Electrical Code Bulletin 119-1970, Section 119.1.b.

Response: Will Comply.		**SMW**

14. Drawing E1.23. Add strobe alarms to the toilet rooms. See NYC Building Code Section 27-292.15, Reference Standard RS 17-3C, and ADA Section 4.28.

Response:	**Drawing E1.23: Drawing is revised to include strobes in toilet rooms.**	**CA**

15. Drawing E1.48. Storage battery installation. Investigate whether there will be sufficient diffusion and ventilation of the battery gases so as to prevent the accumulation of an explosive mixture under both normal and other than normal conditions. The storage batteries can provide explosive gases, even if sealed recombination type batteries are used. See NYC Electrical Code Section 27-3158, the 11/18/92 minutes of the NYC Electrical Code Revision and interpretation Committee, NEC Section 480-8(a), and PA Tenant Construction Review Manual Section 10-B.D.7.

Response:	**Will comply. Ventilation is sufficient.**	**CA**

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16. Drawing E3.01. Show system grounding for the UPS and transformer secondary windings, including grounding electrodes and grounding electrode conductors. See NYC Electrical Code Section 27-3105-b.3.

Response:	**Drawing E3.01: Drawing E4.03 is revised to include grounding detail of transformer and UPS to comply NYC Electrical Code. CA**

17. Drawing E3.01. Increase these grounding conductor sizes which are not at least as large as required in NYC Electrical Code Section 27-3110, Table 1. For example, the minimum size equipment grounding conductor to run with a size 1/0 feeder is size 4, not size 6.

Response:	**Drawing E3.01: Size of grounding conductor is revised to comply NYC Electrical Code Section 27-3110, Table 1. CA**

MECHANICAL

18. Drawing A-1-1; Detail 7, Section through Fuel Oil Tank Room. As required by the NYC Building Code Section 27-829(a)(3), the clearance between the rated non-combustible enclosure and all the sides of the storage tank shall be at least 15 inches. In addition, clarify whether the 2 foot high concrete curb (Detail 6, Part Plan Mezzanine) together with the "oil proof membrane" portion of the enclosure will hold at least equal the capacity of the 6000 gallons storage tank.

Response:	**Reduction of Building Dept. 15" requirement will be acceptable. 2'-6" curb will meet will hold 6000 gal storage tank. CA**

19. Drawing A-1-1: Detail 3, Shaft detail Code Section 27-829(E)(1) requires that shaft for the fuel oil pipe shall be constructed with four-inch concrete or masonry.

Response:	**See architectural drawing. CA**

20. Drawing M1.01. The horizontal portion of the fuel oil piping shall be enclosed in a sleeve of other piping of at least number 1- manufacturer's standard gauge steel, two sizes larger than the fuel pipe therein. Clarify whether the conduits indicated on the Fuel Piping Schematic are of 10-gauge steel as required by the Code, Section 27-820(E)(2).

Response:	**Will comply. See drawing M1.01. CA**

21. Drawing M1.01. Clarify how the space at the Tank Storage Room and the space below it are ventilated. The note is not explicit that the requirements of the Code, Section 27-405 is achieved, i.e., ventilation is continuous, exhaust shall be to the outdoors, and at least 2 air changes per hour is exhausted for each room.

Response:	**Existing ventilation system will be removed from the room and capped at the ceiling of the lobby. New exhaust system (fan E-5) will be extended to the room below tank room. Fan E-5 will be capable to exhaust minimum 2 air changes. See drawings M1.01 and M4.01. CA**

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22. Drawings M1.01 and M1.07. Clarify whether the existing risers being utilized for the new fuel oil lines is schedule 40 seamless steel and enclosed exclusively, containing no other pipes or ducts, in a shaft constructed of 4-inch concrete or masonry. The shaft shall be provided with a drainpipe at its base that leads to an open sight drain or open sump. See Code Section 27-829(f).

Response:	**Silverstein Properties will provide documents to confirm.**	**CA**

23. Drawing M1.07. Discharge plenum and/or opening for the internal combustion engines exhaust creates a fire hazard condition and health hazard with the location of the fuel oil vent and also creates conflict with the fresh air intake opening since they are only 2 feet apart.

Response:	**Specification for the discharge plenum will be revised. Louvers will be blanked off to maintain minimum 10'-0" between intake and discharge. See supplement to the specification and drawing M1.07.**	**CA**

24. Drawing M1.07, Emergency Generator Schematic Diagram Diesel Fire, Indoor Installation. Specify the capacity of the "Tank/Rupture Basin" that it equals at least twice the capacity (275 gallons) of the fuel oil day tank. Clarify also where the "Basin Detail" is shown, as mentioned on the drawing.

Response:	**Will comply. Note "Basin Detail" will be deleted. See drawing M1.07.**	**CA**

25. Drawing M1.23. Provide index for ventilation for each room or space as required by the Code Section 27-182(a)(3).

Response:	**Will comply. See drawing M1.23.**	**CA**

26. Drawing M1.23. Show all the fire dampers, smoke dampers or combination fire/smoke dampers, existing or new, in the ducts that penetrate the new fire rated construction as required by the Code, RS 13-1, Section 3-3.7.2 and the NYC Department of Buildings, Technical Policy and Procedure Notice #6/96. See Drawing A-23-1 for location of all fire rated walls.

Response:	**Will comply. See drawing M1.23.**	**CA**

27. Specification Manual, Section 15120, paragraph 1.1A5. Clarify whether the acoustical treatment of the exhaust plenum for the emergency generators poses hazardous conditions due to the perforations of the inner shell and the ability of the material used for lining to withstand high temperature generated by the internal combination of approval for the material specified in Section 15140, Paragraph 1.1A for the acoustical lining.

Response:	**Specification will be revised. See supplement to the specification.**	**CA**

28. Specification Manual,. Section 15190, Paragraphs 1.3F and 1.3H. PVC material shall not be used above ground and inside the building. In addition, drift elimination shall be noncombustible since conditions of Code Sections 27-337(f)(3) and (4) are not met.

Response:	**Will comply. See supplement to the specification.**	**CA**

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29. Specification Manual, Section 15190, Paragraph 1.4E2. Clarify whether the 3-inch calcium silicate insulation is adequate to limit the surface temperature of the engine exhaust pipe and muffler to not more than 200° F as required by Code Section 27-869(a)(4).

Response:	**Thickness of insulation is in compliance i.e. with the Code Section 27-869(a)(4).**	**CA**

STRUCTURAL

30. The locations and loads of each piece of machinery and equipment having a weight in excess of one thousand pounds shall be noted on the drawings. Code Section 27-257(b)(3).

Response:	**Will Comply**	**CS**

31. Where the existing beams are used to support the new loads, indicate on the drawings their sizes, stud arrangement, and ASTM designation.

Response:	**Will Comply**	**CS**

32. Drawing A-1-1, First Floor Construction Plan.
   a. Trench note on the Plan and Detail 2. Verify with calculations that the existing construction will not be overstressed due to the new trench cut in the existing slab.

   b. Submit details of concrete wall and enclosure for 50 gallons drum.

   c. Details 6 and 7, New Mezzanine. Submit structural design and details verified with calculations of the new Mezzanine construction. Also, investigate the adequacy of the ground floor slab to support the platform columns.

   d. Detail 6. Indicate the height of the new masonry wall, and show how it is braced.

Response:	**Will Comply**	**CS**

33. Drawing A-7-1:
   a. Demolition Notes. Please add the following note: All demolition work to be in compliance with Article 6, Sub-chapter 19 of the NYC Code "Demolition Operations".

   b. Details 4 and 6. Indicate how new curbs are anchored to the slab below.

Response:	**Will Comply**	**SHCA**

34. Drawing A-23-1. Submit calculations to show that the existing construction is not overstressed under the added loads in the new Storage Room 23-24, Libraries 23-28 and 23-18, File Room 23-20, LAN Room 23-23, and Vault Room 23-16.

Response:	**Will Comply**	**CS**

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35. Drawings A-23-2 and A-1-1, Details 4 and 5. Submit design and details of all types of suspended ceilings where the sizes, spacing, and connection details for all members of the ceiling framing are indicated, including connections between hangers and construction above. See Code RS 5-16 and Tenant Construction Review Manual (TCRM) Attachment S2.

Response:	**Will Comply (see dwg. A-23-2)**	**SHCA**

36. Drawing D-0, Detail 10. Please indicate on the plans where partition Type 10 is used.

Response:	**Will Comply (see dwg. A-1-1)**	**SHCA**

37. Drawing *D-3, A/V Enclosures:*

a. Indicate loads on the existing floor from the new construction.

b. Submit details of the screen bracing.

c. Indicate how the new steel posts area anchored to the existing slab.

Response:	**The support for the new projection screen is miscellaneous steel and does not weigh more than 20psf, therefore structural calculations are not required.**	**CS**

38. Drawing S-3:

a. Indicate sizes of the new framing between column lines 33 and 35.

b. note 3. Submit details of the new ½" reinforcing plate.

Response:		**CS**
a)	**No framing is required. Heavy lines are due to drafting error.**	
b)	**Note 3 will be deleted, reinforcing plate is not required.**	

39. Drawing S-4, Part Plan at Roof:

a. Indicate sized of the roof framing.

b. Clarify how the two posts, located between corner posts, are braced in North-South direction.

Response: Will Comply.		**CS**

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40. Drawing S-5:

a. Section 2:

i) Indicate how the new W6 are connected to the existing framing.

ii. Submit braces connection details or indicted forces in them for connection design purposes.

iii. Section 3. Submit column's base plate and anchor bolts detail, verified with calculations.

b. Typical detail for Antenna support. Indicate location of this support on the plan.

Response: **CS**

a) i) The new beams W6 are placed directly onto the existing slab and encased in concrete curbs.

ii) Forces will be indicated on the drawing.

iii) Section 3. New posts are placed on bearing plates welded to new steel beams. There are not bolted base plates.

b) Will comply.

*41. Structural Calculations:

a. It is noted that calculations were submitted only for the new work on the 7th floor and the 23rd floor between column lines 08 and 11. Please submit calculations for the rest of the structural work shown on Drawings S-1, and S-3 through S-5.

b. Submit calculations to verify that the existing columns are not overstressed due to the added loads.

c. The existing floor beams were checked for vertical loads only. Please clarify if they are part of the lateral load resisting system and include the effects of lateral loading in the design, if necessary.

d. For composite beams verify that the existing stud arrangement are adequate for the new loading conditions.

e. For the existing beams used to support the new loads, investigate if the existing connections are adequate for the revised loading conditions.

f. 7th Floor Calculations. Include in the design weight of Fuel Oil Day Tank, shown on Section 6/A/7.1.

g. 23rd Floor Calculations. Include in the design weights of AC units shown in the Schedule on Drawing M4.01.

Response: **CS**

a) Will comply.

b) Will comply.

c) The existing floor beams used to support the new loads are only gravity beams, not part of the lateral load resisting system.

d) Will comply.

e) Will comply.

f) Will comply.

g) Will comply.

Swanke Hayden Connell Ltd./Swanke Hayden Connell & Partners LLP
295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059

FIRE PROTECTION

42. Specification Section 15305:

    a. Subsection 1.1C.7: Revise to read "Prepare and submit to the Port Authority, as set... acceptable to the Port Authority."

    b. Subsection 1.6A.3: Revise to read: "...as required by the NYC Building Code, and by PA Tenant Construction Review Manual, Attachment S3."

Response:	**Will comply.**	**CA**

43. Specification Section 15310, Subsection 2.1.A: Revise to read: " in accordance with NYC Building Code Reference Standards RS 17-1 and 17-2.

Response:	**Will comply.**	**CA**

44. Specification Section 15330:

    a. Subsection 1.1D: Revise third sentence to read :... and Ordinary Hazard areas in NYC Building Code Reference Standard RS 17-2." Delete "Fire Department" in the fourth Sentence.

    b. Subsection 2.4.D: Revise first sentence to read "... in accordance with NYC Building Code Reference Standard RS 17-2 (1989 Edition NFPA 113) Section 3-11-7."

Response:	**Will comply.**	**CA**

45. Sprinkler Specification 15340, Subsection 1.4A. Drawing PP4.23, Pre-action sprinkler systems single interlock type with Electrical Release 1.B. requires 10 years of experience. Coordinate and revise accordingly.

Response:	**Will comply and correct to 10 years of experience.**	**CA**

*46. Drawing FP1.01. The drawing shows sprinkler protection underneath the new tank floor. Please provide sprinklers for the space above the new tank floor also, to protect the new oil tank.

Response:	**Oil tank room not to be sprinkled with wet sprinkler protection due to hazard involved. Alternative fire protection system for Oil tank Room see Dwg. FP1.01 & FP5.23.**	**CA**

47. Drawing FP2.07Provide full sprinkler protection in the proposed OEM space, including the new Generator and Tank Room.

Response:	***Generator room provided with smoke detector in compliance with Code.***	**CA**

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212 226 9696, Fax 212 219 0059

48. Drawing FP3.23:

a. Sprinkler layout exceeds 120 sf. Per head for ordinary hazard in Sprinkler Specifications 15305, Subsection 1.8C.1, and 150 sf per head for light hazard in Sprinkler Specification 15305, Subsection 1.8C.2. Coordinate and revise accordingly.

Response:	**Will comply.**	**CA**

b. Submit signed and sealed hydraulic sprinkler calculation.

Response:	**Contractor shall provide hydraulic calculations based on coordinated installation drawings. We can supply a copy of the hydraulic calculations for the design drawing for information and review.**	**CA**

49. Drawing FP4.23, Pre-action Sprinkler System Description and Sequence of Operations (Items 2.B and 3), Pre-action System Assembly Detail, and Pre-action Fire Sprinkler System Electrical Control One-Line Rider Diagram. The NYC Fire Department prohibits cross zoning of detectors in preaction systems except where a halon system is also protecting an area identical to that protected by the sprinklers. Revise accordingly.

Response:	**Will comply.**	**CA**

50. Drawing FP5.23:

a. New York Sprinkler Note 9: Revise to read "... as per Section 3-11-7 of RS 17-2..."

b. New York Sprinkler Note 15: Revise to read "... as per Section 3-11-6.3(a)"

c. New York Sprinkler Note 19: Revise to read "... as per Section 3-9.4 of RS 17-2."

d. New York Sprinkler Note 20: Revise to read "... as per Section 3-6 of RS 17-2."

e. New York Sprinkler Note 22: Revise to read "... as per Section 3-8.3 of RS 17-2."

f. New York Sprinkler Note 24: Revise to read "... as per Section 3-9.1.2 of RS 17-2."

g. New York Sprinkler Note 26: Revise to read "... as per Section 3-3.2 of RS 17-2."

h. New York Sprinkler Note 27: Revise to read "... as per Section 3-11 of RS 17-2."

i. New York Sprinkler Note 28: Revise to read "... as per Section 3-11.6 of RS 17-2."

j. Sprinkler Equipment Schedule. Add orifice size and temperature rating of specified heads.

Response:	**Will review references and comply.**	**CA**

51. New York City Building Code Section 27-979(b) required smoke detection in mechanical rooms over 75 sf in gross floor area in all buildings in all occupancy groups. Provide accordingly.

Response:	**Will comply.**	**CA**

Swanke Hayden Connell Ltd./Swanke Hayden Connell & Partners LLP
295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059

TEST REPORT # 970077
70340

Independent Textile Testing Service, Inc.

P.O.Box 1948 1503 Murray Ave.

Dalton, Georgia 30722-1948 • Phone 706-278-3013 • Fax 706-272-7057

TEST REPORT

CUSTOMER: Interface Flooring Systems, Inc. February 14, 1997

SUBJECT: "Consumer Product Safety Commission (CPSC) FF 1-70"

FLAMMABILITY TEST

STYLE	COLOR	ROLL	TESTED	PASSED
6626 Retro	---	---	8	8

Secondary Backing: Cushion Bac

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS
MAY 14 1998
W98-7134 (2)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

OFFICE C.

APPROVED
MEETS OR EXCEEDS
FEDERAL FLAMMABILITY
STANDARD CPSC FF 1-70

AUTHORIZED SIGNATURE

Our letters and reports are for the exclusive use of the customer to whom they are addressed, and their communication to any others or the use of the name of Independent Textile Testing Service, Inc., must receive our prior written approval. Our letters and reports apply only to the sample tested and are not necessarily indicative of the qualities of apparently identical or similar products. The reports and letters and the name of the Independent Textile Testing Service, Inc., are not to be used under any circumstances in advertising to the general public.

Independent Textile Testing Service, Inc.
1503 Murray Avenue / P.O. Box 1948
Dalton, Georgia 30722-1948
Telephone 706-278-3013 Fax 706-272-7057

TEST NUMBER
970077
Attachment
#70340

TEST REPORT

CUSTOMER: Interface Flooring Systems, Inc. February 14, 1997

SUBJECT: Test conducted as in ASTM E-648 except, at customer request, modified to include New York City Local Law 16 which states "The exposure shall be at least 15 minutes", and the New York Port Authority which states "The time frame may be limited to 15 minutes".

The abbreviated test procedure is not accepted in other jurisdictions and may not be indicative of the performance of the test specimen when tested in accordance to ASTM E-648, and is to be used as an attachment only to the completed test data per ASTM E-648 as required by New York City Local Law 16 and the New York/New Jersey Port Authority.

SAMPLE IDENTIFICATION:

Style: 6626 Retro
Secondary Backing: Cushion Bac

TEST ASSEMBLY:

Mounted on Sterling Board
(Using Grid-Set Pressure Sensitive Adhesive)

TEST RESULTS:	SPECIMEN #1		SPECIMEN #2		SPECIMEN #3	
15 Minute Radiant Flux:	.68	watts/cm²	.66	watts/cm²	.68	watts/cm²
15 Minute Burn Length:	31.0	cm.	32.0	cm.	31.0	cm.
15 Minute Flame Front:	15 minutes		15 minutes		15 minutes	

Average Radiant Flux After 15 Minutes:	.67	watts/cm²
Estimated Standard Deviation:	.01	watts/cm²
	1.7%	Coefficient of Variation

Authorized Signature

NVLAP

INDEPENDENT TEXTILE TESTING SERVICE, INC.
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Received Time May. 6. 10:31AM

TEST NUMBER
970077
#70340

Independent Textile Testing Service, Inc.

P.O.Box 1948 1503 Murray Ave.

Dalton, Georgia 30722-1948 • Phone 706-278-3013 • Fax 706-272-7057

Customer: Interface Flooring Systems, Inc. February 14, 1997

Subject: The test data summarized below was conducted as ASTM E-662 with the exception that the specific optical density figures are those measured at the 4 minute interval of the test only, to include, the New York City Building Code (RS 5-20) and the Port Authority of New York/New Jersey requirements which states, "The smoke developed ratings in either the flaming or no-flaming mode shall not exceed three hundred within the first four minutes of the test."

OPERATING CONDITIONS

Irradiance: 2.5 Watts/cm² G Factor = 132

Thermal Exposure: Non-Flaming

Furnace Voltage: 110

Burner Fuel:

SAMPLE IDENTIFICATION:

Style: 6626 Retro
Secondary Backing: Cushion Bac

TEST RESULTS

	#1	#2	#3	Avg.
Spec. Opt. Density at 4.0 min.	87	87	89	88

AUTHORIZED SIGNATURE

Our letters and reports are for the exclusive use of the customer to whom they are addressed, and their communication to any others or the use of the name of Independent Textile Testing Service, Inc., must receive our prior written approval. Our letters and reports apply only to the samples tested and are not necessarily indicative of the qualities of apparently identical or similar products. The reports and letters and the name of the Independent Textile Testing Service, Inc., are not to be used under any circumstances in advertising to the general public.

Received Time May 6 10:31AM

T.A 987-134

SWANKE HAYDEN CONNELL ARCHITECTS

Fax Message

To: Port Authority of NY & NJ
Attn; Mr.Jeff. Gertler

From: Juan M. Mejia

Fax: (212) 435-8168

cc: Joseph Aliotta (SHCA)

Job: 5576A

Date: 05/14/98 **Pages:** 3

Message:

RE: Mayor's Office of Emergency Management
7 World Trade Center, NYC, NY 10048

ATTACHED PLEASE FIND SUPPLEMENT TO FIRE PROTECTION SPECIFICATIONS THAT WILL BE ISSUED TO THE CONTRACTOR AS PART OF HIS SCOPE OF WORK, THIS SUPPLEMENT ADDRESES COMMENTS # 42, 43, 44 AND 45.
WE WOULD APPRECIATE IF YOU COULD GIVE US THE NAME AND TELEPHONE # OF THE EXAMINER TO DISCUSS ANY OTHER ISSUES ON FIRE PROTECTION REVIEW.

PLEASE CALL ME OR JOE ALIOTTA IF YOU HAVE ANY QUESTIONS .

Thanks.

Juan M. Mejia
(212) 219 - 6750

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THE PORT AUTHORITY OF
ENGINEERING DEPT. QUALITY
DESIGN STANDARDS

MAY 14 1998
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Swanke Hayden Connell Ltd./Swanke Hayden Connell & Partners LLP
295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059

MAY-14 98 12:01 FROM:SHCA LTD TO:9435816B PAGE:01/03

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

SUPPPLEMENT TO THE FIRE PROTECTION SPECIFICATION

SECTION 15305

1. Subsection 1.1, Paragraph C.7

   Revise to read as follows:

   7. Prepare and submit to the Port Authority a set of "as-built" record drawings for approval, in a form acceptable to the Port Authority.

2. Subsection 1.6, Paragraph A.3

   Revise to read as follows:

   3. All rigidly or resiliently installed equipment, piping, etc., shall be capable of withstanding the seismic forces to which it might be subjected without permanent displacement of the equipment from the installed position as required by the New York City Building Code and by Port Authority Construction Review Manual.

Section 15310

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1. Subsection 2.1, Paragraph C

   Revise to read as follows:

   C. Piping shall be supported from the building structure in accordance with New York City Building Code Reference Standard RS 17-2.

THE PORT AUTHORITY
ENGINEERING DEPT QUALITY
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Section 15330

1. Subsection 1.1, Paragraph D

   Revise to read as follows:

   D. Before any work is commenced, syhop drawings shall be carfully prepared and submitted for approval. It is required that the sprinkler systems be sized hydraulically in accordance with NFPA standards. Submit hydraulic calculation of each system for each shop drawing, showing balanced system delivery, and

balanced supply and demand, as defined for Light Hazard and Ordinary Hazard areas in New York City Building Code Reference Standards RS 17-1 and RS 17-2. Such drawings and calculations muyst be reviewed and approvaed by all governing authorities, Fire Department, Owners Insurance Underwriters, Factory Mutual and Industrial Risk Insureres before any work is commenced at the jobsite. The mains and risers supplying the fire department valves will remain as sized on the drawings.

2. Subsection 2.4, Paragraph D

Revise to read as follows:

D. Provide stock of extra sprinkelr heads, sprinkler wrenches in accordance with New York City Building Code Reference Standard RS 17-2, 1989 Edition of N.F.P.A. Pamphlet No. 13) Section 3-11.7. Cabinets shall be reliable or other approved.

Section 15340

1. Subsection 1.4, Paragraph A

Revise to read as follows:

A. Applicator: Company specializing in sprinkler installation with ten years minimum experience.

1854.98\revpsec

Office of Emergency Management
7 World Trade Center
New York, New York 10048
SHCA Project No. 5576A

Issued fo P.A. review May 13, 1998

Door Schedule

Floor	Door Tag	Jamb Opening Width	Jamb Opening Height	Frame Data Jamb	Frame Data Head	Frame Data Material	Door Data Type	Door Data Material	Door Data Sill	Door Data Thk.	UL Rating Label (Hrs)	Hardware Set	Remarks
23RD.	1A	3'-0"	8'-0"	Door & frame by Insulguard model # 544 custom ht.								17	W/ CARD READER/ BULLET RESISTANT LEVEL 3. DOOR & FRAME BY INSULGARD #544 CUSTOM HT (FAIL SAFE LOCK)
	1B	3'-0"	8'-0"	Door , frame and sidelite by Insulgard model #'s ICDS full lite and ICFW/1-3 side lite (custom)								7	W/ CARD READER/ BULLET RESISTANT LEVEL 3 (FAILSAFE LOCK)
	2A	3'-8"	8'-4"	J2	H2	HM	A	HM		1 3/4		3	W/CARD READER
	2B	3'-8"	8'-4"	J2	H2	HM	A	HM		1 3/4"		3	W/CARD READER
	2C	2'-10"	8'-0"	EE ELEV	EE ELEV	MTL							BY ACME
	2D	(2) 2'-101/2"	8'-0'	EE ELEV	EE ELEV	MTL							BY ACME
	3	3'-0'	8'-0'	J5	H5	WD	A	WD		2 1/4		5	W/LIGHT SEALS /W DOOR CONTACT
	4	3'-0'	8'-0'	Door & frame by insulguard model # 544 custom ht wit wood veneer to match millwork								18	W/CARD READER/ BULLET RESISTANT LEVEL 3 / EMI SHIELD
	5	(2) 3'-0'	8'-0'	Door & Frame by Insulguard model # ICDS full lite custom ht.								8	W/CARD READER/ BULLET RESISTANT LEVEL 3 (
	6	3'-0'	8'-0'	J6	H6	WD	A	WD		2 1/4		13A	
	7A	3'-0'	8'-0'	Door & frame by Insulguard model # 544 custom ht. with EMI shielding and wood veneer to match millwo								18	BULLET RESISTANT LEVEL 3 & EMI SHIELD
	7B	3'-0'	8'-0'	Door & frame by Insulguard model # 544 custom ht. with EMI shielding and wood veneer to match millwo								18	BULLET RESISTANTLEVEL 3 & EMI SHIELD
	8	3'-0'	8'-0'	J6	H6	WD	A	WD	A	2 1/4		11	1' UNDERCUT

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TENANT CONSTRUCTION REVIEW UNIT
MAY 14 1998
W98-7134 (2)

THE PORT AUTHORITY OF
ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS

Office of Emergence Management, 5576A,
7 World Trade Center, New York, NY

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Printed 5/11/98 4 32 PM

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DOOR SCHEDULE
08000 - 1 of 10

Door Schedule

Floor	Door Tag	Jamb Opening		Frame Data			Door Data				UL Rating	Hardware	Remarks
		Width	Height	Jamb	Head	Material	Type	Material	Sill	Thk.	Label (Hrs)	Set	
	8A	2'-0"	8'-0"	J9	H9		I	WD		2 1/4		4	
	9	3'-0'	8'-0'	J5	H5	WD	A	WD		2 1/4		3A	W/CARD READER
	10	3'-0'	8'-0'	Sound proof door and frame assembly RF (50db) with EMI shielding and wood veneer to math millwork b								3A	W/CARD READER/SOUND PROOF & EMI SHIELD
	11A	3'-0'	8'-0'	J5	H5	WD	A	WD		2 1/4		13A	
	11B	3'-0'	8'-0'	J5	H5	WD	A	WD		2 1/4		13A	
	12	3'-0'	8'-0'	J6	H6	WD	A	WD	A	2 1/4		11	1' UNDERCUT
	12A	(2) 1'-6'	8'-0"	J9	H9		H	WD		2 1/4		4	
	13	(2) 3'-0'	8'-0'	Door & frame by insulguard model # ICDS full lite custom ht.								8	W/CARD READER/ BULLET RESISTANT LEVEL 3
	14	3'-0'	8'-0'	J5	H5	WD	A	WD		2 1/4		3A	
	15A	3'-0'	8'-0'	J5	H5	WD	A	WD		2 1/4		3A	W/CARD READER
	15B	(2) 2'-3"	8'-0"	D/A-10	J/A-10	WD	C	WD		21/4"		14	
	16	3'-0'	8'-0'	GSA Class 5 security vaul door by Overly model # 1883 gc. to confirm swing.									SAFE DOOR W/ DOOR CONTACTS
	17	3'-0'	8'-0'	J5	H5	WD	A	WD		2 1/4		3A	W/CARD READER

Door Schedule

Floor	Door Tag	Jamb Opening Width	Jamb Opening Height	Frame Data Jamb	Frame Data Head	Frame Data Material	Door Data Type	Door Data Material	Door Data Sill	Door Data Thk.	UL Rating Label (Hrs)	Hardware Set	Remarks
	18	3'-0'	8'-0'	J3	H3	HM	A	HM		1 3/4		5	W/DOOR CONTACT
	19	3'-0'	8'-0'	7/A-4	1A/A-4	MTL	D	MTL				1	BY ACME
	20	3'-0'	8'-0'	J4	H4	HM	E	HM		1 3/4		5A	W/ DOOR CONTACT
	21A	3'-0'	8'-0'	J4	H4	HM	E	HM		1 3/4		13	
	21B	3'-0'	8'-0'	J4	H4	HM	E	HM		1 3/4		13	
	21C	3'-0'	8'-0'	Door & frame by insulguard model # ICDS full lite custom ht.								18	W/CARD READER (FAIL SAFE LOCK)
	22	3'-0'	8'-0'	J4	H4	HM	A	HM		1 3/4		5A	
	23	4'-0"	8'-0'	J4	H4	HM	A	HM		1 3/4	3/4HR.	3	W/CARD READER
	24	3'-0'	8'-0'	J4	H4	HM	A	HM		1 3/4		5A	W/ DOOR CONTACT
	25	3'-0'	8'-0'	J4	H4	HM	A	HM		1 3/4		5A	
	26	3'-0'	8'-0'	7/A-4	1A/A-4	MTL	D	HM		1 3/4		1	BY ACME
	27	3'-0'	8'-0'	7/A-4	1A/A-4	MTL	D	HM		1 3/4		1	BY ACME
	28	3'-0'	8'-0'	J4	H4	HM	A	HM		1 3/4		13	

Door Schedule

Floor	Door Tag	Jamb Opening Width	Jamb Opening Height	Frame Data Jamb	Frame Data Head	Frame Data Material	Door Data Type	Door Data Material	Door Data Sill	Door Data Thk.	UL Rating Label (Hrs)	Hardware Set	Remarks
	29	3'-0"	8'-0"			HM	A	HM		1 3/4			
	30	3'-0"	8'-0"	J4	H4	HM	A	HM		1 3/4		13	
	31	3'-0"	8'-0"	J4	H4	HM	A	HM		1 3/4		10	1" UNDECUT
	32	3'-0"	8'-0"	J4	H4	HM	A	HM		1 3/4		10	1' UNDERCUT
	33	3'-0"	8'-0"	J4	H4	HM	A	HM		1 3/4		13	
	34	3'-0"	8'-0"	7/A-4	1A/A-4	MTL	D	MTL		1 3/4		1	BY ACME
	35	4'-0"	8'-0"	J1	H1	HM	E	HM		1 3/4		3	W / DOOR CONTACT
	36	3'-0"	8'-0"	J4	H4	HM	A	HM		1 3/4		1	
	37	3'-0"	8'-0"	7/A-4	1A/A-4	MTL	D	HM		1 3/4		1	
	38	(2) 3'-0"	8'-0"	7/A-4	1A/A-4	MTL	F	MTL				9	
	40A	3'-0"	8'-0"	Door & frame by Insulguard model # ICDS full lite custom ht.								18	W / DOOR CONTACT / BULLET RESISTANT LEVEL 3. W READER INTERFACE (FAIL SAFE LOCK)
	40B	3'-0"	8'-0"	Door & frame by Insulguard model # ICDS full lite custom ht								18	W/CARD READER/ BULLET RESISTANT LEVEL 3 (FAIL SAFE LOCK)
	40C	3'-0"	8'-0"	J9	H9		A	WD		2 1/4		14	

Door Schedule

Floor	Door Tag	Jamb Opening		Frame Data			Door Data				UL Rating	Hardware	Remarks
		Width	Height	Jamb	Head	Material	Type	Material	Sill	Thk.	Label (Hrs)	Set	
	41A	(2) 2'-6"	8'-0"	J10	H10	WD	C	WD		2 1/4		4	
	41B	(2) 2'-6"	8'-0"	J10	H10	WD	C	WD		2 1/4		4	
	41C	(2) 2'-6"	8'-0"	J10	H10	WD	C	WD		2 1/4		4	
	41D	(2) 2'-6"	8'-0"	J10	H10	WD	C	WD		2 1/4		4	
	41E	(2) 2'-6"	8'-0"	J10	H10	WD	C	WD		2 1/4		4	
	42A	3'-0"	8'-0"	J10	H10	HM	A	HM		1 3/4		12	
	42B	(2) 2'-6"	8'-0"	J10	H10		C	WD		2 1/4'		4	
	42C	(2) 2'-6"	8'-0"	J10	H10		C	WD		2 1/4'		4	
	43	(2) 3'-0"	8'-0"	J2	H2	HM	C	HM	H-11/D-0	1 3/4	1 1/2 HR.	18	MECHANICAL ROOM / W DOOR CONTACTS W/ ASTRIGAL & SOUND SEAL
	44	3'-0"	8'-0"	J1	H1	HM	E	HM/GL		1 3/4		12	
	44A	3'-0"	8'-0"	J1	H1	HM	A	HM		1 3/4		3	W/CARD READER
	45	3'-0"	8'-0"	J4	H4	HM	E	HM/G;		1 3/4		12	
	46	3'-0"	8'-0"	J1	H1	HM	E	HM/GL		1 3/4		12	

Door Schedule

Floor	Door Tag	Jamb Opening		Frame Data			Door Data				UL Rating	Hardware	Remarks
		Width	Height	Jamb	Head	Material	Type	Material	Sill	Thk.	Label (Hrs)	Set	
	47	3'-0"	8'-0"	J4	H4	HM	A	HM		1 3/4		5B	
	48A	3'-0"	8'-0"	J4	H4	HM	A	HM		1 3/4		10	1" UNDERCUT
	48B	3'-0"	8'-0"	J4	H4	HM	E	HM		1 3/4		3	W/CARD READER (FAIL SAFE LOCK)
	49	3'-0"	8'-0"	J4	H4	HM	A	HM		1 3/4		5B	
	50	3'-0"	8'-0"	J4	H4	HM	A	HM		1 3/4		5B	
	51	3'-0"	8'-0"	J4	H4	HM	A	HM		1 3/4		1	
	52	3'-0"	8'-0"	J2	H2	HM	A	HM		1 3/4		3	W/CARD READER
	53A	3'-0"	8'-0"	J2	H2	HM	E	HM/GL		1 3/4		12	
	53B	3'-0"	8'-0"	J2	H2	HM	E	HM/GL		1 3/4		12	
	54A	(2) 3'-0"	8'-0"	J4	H4	HM	C	HM		1 3/4		8	W/CARD READER (FAIL SAFE LOCK)
	54B	(2) 3'-0"	8'-0"	J4	H4	HM	C	HM		1 3/4		8	W/CARD READER (FAIL SAFE LOCK)
	55	3'-0"	8'-0"	J1	H1	HM	A	HM		1 3/4		5B	W / DOOR CONTACT
	56	3'-0"	8'-0"	J4	H4	HM	A	HM		1 3/4		13	1" UNDERCUT

Door Schedule

Floor	Door Tag	Jamb Opening Width	Jamb Opening Height	Frame Data Jamb	Frame Data Head	Frame Data Material	Door Data Type	Door Data Material	Door Data Sill	Door Data Thk.	UL Rating Label (Hrs)	Hardware Set	Remarks
	57	EXIST.	EXIST.									15	W/ DOOR CONTACT
	58	EXIST.	EXIST.									15	W/ DOOR CONTACT
	59A	EXIST.	EXIST.									15	
	59B	EXIST.	EXIST.									15	
	60	EXIST.	EXIST.									15	
	61	EXIST.	EXIST.									15	W/DOOR CONTACT
	62	EXIST.	EXIST.									15	W/ DOOR CONTACT
	63	EXIST.	EXIST.									15	W/ DOOR CONTACT
	64	EXIST.	EXIST.									15	W/ DOOR CONTACT
	65A	EXIST.	EXIST									15	
	65B	EXIST.	EXIST.									15	
	66A	EXIST.	EXIST.									15	
	66B	EXIST.	EXIST.									15	

Door Schedule

Floor	Door Tag	Jamb Opening		Frame Data			Door Data				UL Rating	Hardware	Remarks
		Width	Height	Jamb	Head	Material	Type	Material	Sill	Thk.	Label (Hrs)	Set	
	67	EXIST.	EXIST.									15	W/ DOOR CONTACT
	68	EXIST.	EXIST.									15	W/ DOOR CONTACT
	69	EXIST.	EXIST.									15	W/ DOOR CONTACT
	70	EXIST.	EXIST.									15	W/ DOOR CONTACT
	71	EXIST.	EXIST									15	W/ DOOR CONTACT
	72A	EXIST.	EXIST.									15	
	72B	EXIST.	EXIST.									15	
	73	EXIST.	EXIST.									15	W/ DOOR CONTACT
	74	EXIST.	EXIST.									15	W/ DOOR CONTACT
	75	EXIST.	EXIST.									15	W/ DOOR CONTACT
	76	EXIST.	EXIST.									15	W/DOOR CONTACT
	77	EXIST.	EXIST.									15	
	78	EXIST.	EXIST.									15	W/DOOR CONTACT

Door Schedule

Floor	Door Tag	Jamb Opening Width	Jamb Opening Height	Frame Data Jamb	Frame Data Head	Frame Data Material	Door Data Type	Door Data Material	Door Data Sill	Door Data Thk.	UL Rating Label (Hrs)	Hardware Set	Remarks
7TH.	1	(2) 3'-0"	8'-0"	J-11/D-0	H-11/D-0	HM	C	HM	H-11/D-0	13/4"	1 1/2HR.	16	W/ DOOR CONTACT W/ ASTRIGAL AND SOUND SEAL
	2	(2) 3'-0"	8'-0"	J-11/D-0	H-11/D-0	HM	C	HM	H-11/D-0	13/4"	1 1/2HR.	16	W/ DOOR CONTACT W/ ASTRIGAL AND SOUND SEALS
48TH	1	3'-0"	6'-0"	6/D-12	3/D-12	ALUM	A	ALUM	-	13/4"		5	W/ DOOR CONTACT W/SADDLE AND WEATHER SEALS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

SUPPLEMENT TO THE HVAC SPECIFICATION

SECTION 15120

1. Paragraph 1.1.A.5 - Delete "and the discharge plenum at the emergency generators."

   Add the following:

   Discharge plenum at the emergency generators shall be double wall construction 4" thick, built of 16 GA galvanizes sheet metal with high temperature block insulation.

   Plenum shall be built as per SMACNA standards for 2" w.g. pressure classification. All joints, seams, connections and abutments to the building structure shall be sealed with suitable pressure and temperature compounds and gaskets.

   Pipe penetrations shall be sealed to prevent air leakage and condensation movement through the seal. Inner sheet shall be of G90 coated galvanized steel with welded connections. All weld on casing interior shall be painted.

   Plenum shall be constructed to withstand 133% of the rated pressure without structure failure. Wall and roof deflections at the rated pressure shall not exceed 1/8" per foot.

   High temperature block insulation shall be 11 lbs. Per cu. ft. Density molded hydrous calcium silicate with a maximum K factor of 0.42 at 200 degrees F mean temperature.

   Insulation shall be securely wired in place with copper clad wire or galvanized steel bands (½" x .015) on 12" centers.

   All joints and voids of insulation shall be filled and pointed with mineral wool cement.

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SECTION 15150

1. Add paragraph 1.1.M

   Dampers shown on drawings designated as "F/SM" shall comply with the following:

   Dampers shall be pneumatically operated combination fire and smoke Ruskin, Imperial, or approved equal. They shall be provided with factory installed U.L. rated full sleeves. Provide air foil or "V" Blade damper blades supported with shafts and stainless steel bearings to allow daily operation. Provide intermediate supports for damper blades more than 36" long. They shall conform to UL Standard 555S as leakage rated dampers in smoke control systems and when closed shall be the equivalent of a 1-1/2 hour fire damper. Leakage shall conform to Class 2 with maximum leakage of 10CFM/Sq. Ft. at

1" W.G. Damper actuators (U.L. approved) and EP's shall be provided by the damper manufacturer.

Dampers shall have a fusible link which melts on heat causing damper to close and lock in a close position.

2. Add paragraph 1.2.A.11

Air conditioning units AC-4, AC-5 and AC-6 are equipped with the water side economizer coil. Provide an adjustable aquastat (set for 55°±) on condenser water supply line to activate free cooling mode. If free cooling operation cannot satisfy space load, mechanical cooling shall be activated.

SECTION 15190

1. Paragraph 1.3.B revised as follows:

.....130 GPM of water from 99.8°F to 84.4°F at 78°F wet bulb.....

2. Paragraph 1.3.C revised as follows:

change: "galvanized steel" to "stainless steel."

3. Paragraph 1.3.D

add: "Provide a variable pitch fan drive."

4. Paragraph 1.3.F

change: "PVC" to "galvanized."

5. Paragraph 1.3.G

change: "2 HP pump motor"... to "1-1/2 HP pump motor."

6. Paragraph 1.3.H

change: ".....Specially formulated PVC to "galvanized steel."

7. Paragraph 1.3.0

Delete in its entirety.

8. Paragraphs 1.4.A.11

Delete.

9. Paragraph 1.4.A.13

To be revised as follows:

Each engine will be provided with the fuel oil pump. Pump suction to be connected to the fuel oil day tank. Fuel oil return from each engine will be combined and run back to the day tank.

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SMW Project 5149

NEW YORK CITY OFFICE OF EMERGENCY MANAGEMENT
EMERGENCY OPERATIONS CENTER

Section 16700B
Copper and Fiber Optic Telecommunications Backbone Cable Plant Specifications

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DESIGN STANDARDS
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ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

Prepared for:
Swanke Hayden Connell Architects
New York, New York

May 13, 1998 - Issued For P.A. Review

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SECTION 16700B
COPPER AND FIBER OPTIC TELECOMMUNICATIONS
BACKBONE CABLE PLANT SPECIFICATIONS

PART 1 - INTRODUCTION AND PROJECT BRIEF

The New York City Office of Emergency Management (OEM) which operates under the authority of the Office of the Mayor of the City of New York is in the process of creating an Emergency Operations Center (EOC) at 7 World Trade Center. The architectural firm of Swanke Hayden Connell of New York City has engaged the consulting firm of Shen Milsom and Wilke of New York City as a specialty consultant in the area of technology infrastructure design. This infrastructure will utilize a mixture of copper and fiber optic cables to transport voice, data, video and multimedia services throughout the facility.

Section 16700 Documents

1. Section 16700A describes the New York City Department of Information Technology and Telecommunications (DoITT) Scope of Work.

2. Section 16700B (**this document**) describes the installation of copper and fiber optic backbone cabling for services not covered in Section 16700A.

3. Section 16700C describes the installation of the facility's data, cable TV service and other miscellaneous systems infrastructure not described elsewhere.

Scope of Work Summary

The installation, termination, testing and commissioning of vertical backbone fiber optic cable between the twenty-third (23rd) floor and the first (1st) floor electric closet "D" as follows:

- One (1) twenty-four stand (24-strand) multimode fiber optic cable and one (1) six-strand (6-strand) single-mode fiber optic cable between the area under the press corp riser in the Press Room to electric closet "D" on the first (1st) floor of the building (located in the south-east corner of the building). The routing will from the Press Room to Telecom Closet "A" on the 23rd floor. The cable will then proceed vertically down to the 7th floor where it will transition horizontally to electric closet "D." The cable will then proceed vertically down to the 1st floor where it will terminate in a wall-mounted equipment rack provided by others.

- The installation of fiber optic termination trays as required.

- The installation of cable management hardware on backboards and in equipment racks in sufficient quantities and of the proper type to ensure an orderly and neat cable installation.

Notes:

1. *The term "installation" includes the materials and labor required to physically install, terminate, test and label the designated cable. After installation the system shall be fully functional and ready to use for its intended purpose.*

2. Cable tray and conduit sleeves, when shown on the telecommunications drawings, are for reference only. These items will be provided by others under a separate contract.

PART 2 - GENERAL TERMS AND CONDITIONS

The following shall apply to all work under this Contract:

A. The Contractor shall comply with all applicable federal, state and local regulations and statues.

B. *The specifications in this document explain the basic scope of work to be performed and the basic duties of the Contractor. This document is not intended to be used as a complete Design Manual or Bill of Materials for all materials required under this Contract.*

C. The Contractor shall not sub-contract any portion of the work required under this contract without the express written permission of the Architect. Only full-time, permanent employees of the Contractor shall be used on this project.

D. The Contractor shall, based on prior experience with projects of similar size and scope, bring to the attention of the Architect and Shen Milsom & Wilke, in writing, any items not listed in this specification that are required to achieve the intent of this document.

E. The work to be performed under this contract may require that existing voice or data services be interrupted for equipment installation or testing. Therefore, the Contractor must work in close cooperation with the project team to coordinate and schedule the work to be done. The Contractor should expect that some of the work required under this contract will be done after normal business hours, on holidays and on weekends depending on the project schedule or to minimize service disruptions.

F. The Contractor will be required to meet with selected project personnel one week before the start of the work described in this document to review any required changes to the requirements of this document. If, as a result of this meeting, there is a modification of the Contractor's price, the changes shall be submitted in writing to designated project personnel for approval. Written approval from the Architect for cost adjustments is required before any work may begin unless otherwise documented in writing.

G. Every attempt will be made to provide complete written documentation for the work to be done under this contract, but the Contractor must be prepared to work from verbal

directions from designated project personnel. Such verbal communication shall be documented, in writing, without delay and circulated to all parties.

H. It is the Contractor's responsibility to coordinate and provide for the movement of equipment, delivery of materials, access to the job site, establishing a site office and other ancillary activities.

PART 3 - SPECIAL CONDITIONS

A. Applicable engineering standards, specifications, drawings and codes referred to in this document shall be considered part of the contract specifications.

B. The Contractor is responsible for, and shall pay for, any and all permits and licenses required under this contract. The Contractor shall request, obtain, and schedule any and all required inspections or other regulatory coordination services as may be required. If required, the Contractor shall coordinate his activities with service providers to obtain the services required under this contract. The Contractor shall include in his price all costs to be incurred relative to the furnishing and installation of the system described herein.

C. *It is the intent of these specifications to provide a complete cable plant, ready for use. Any items not specifically shown on the drawings or called for in the specifications, but normally required to conform with the intent of this contract are to be considered as part of the Contract.*

D. To provide an engineered level of performance only products from one manufacturer shall be supplied for each functional item[1] as approved by the Architect or the Architect's designated representative. Multiple manufacturers of an item will not be permitted, unless specifically approved in writing by the Architect or the Architect's designated representative.

E. This document describes equipment and performance specifications. Installation details shall be as indicated on the Telecommunications Drawings. Any discrepancies found between the Specification and the Drawings shall be immediately brought to the attention of the Architect or the Architect's designated representative.

F. *Should terminology, including, but not limited to, "shall"; "provide"; "install;" "complete;" "furnish" fail to be included explicitly in the text of this document, they shall apply implicitly to ensure that a fully-functional cabling system is provided.*

[1] For example: UTP cable, fiber optic cable, termination blocks, etc.

PART 4 - TESTING

A. *The Scope of Work covered by this Contract includes the items described in Section 1 of this document including all labor necessary to perform and complete such construction, all materials and equipment required and all services, facilities, tools, equipment necessary to perform and complete such construction;*

B. The testing of the cables installed under this contract shall be done in accordance with industry standard practices. In all cases the testing criteria shall be normalized to the physical installation (e.g. a specification for attenuation per 1,000 feet shall be normalized to the actual installed cable length).

1. The contractor shall provide the make, model and serial number of the test equipment to be used as well as proof of calibration.

2. The results of Cat. 5, UTP basic link testing may be reported as Pass/Fail.

3. The testing criteria for enhanced performance UTP cable basic link testing will be defined by the Owner, SM&W and the contractor at the time of contract award. At a minimum, enhanced performance cable shall pass Cat. 5, UTP testing standards.

4. Fiber optic cable shall be tested in accordance with EIA/TIA 526-14 *Optical Power Loss Measurement of Installed Multi-mode Fiber Cable Plant* and EIA/TIA 526-7 *Optical Power Loss Measurement of Installed Single-mode Fiber Cable Plant.*

5. Multi-mode fiber optic cable shall be tested for attenuation loss at 850 nm and 1300 nm. Single-mode fiber optic cable shall be tested for attenuation loss at either 1310 nm or 1550 nm.

6. The contractor shall maintain a log documenting the name of the installer performing the test; the date and time of the test; and the make, model and serial number of the testing device used. It is also recommended, but not required, that the contractor keep an audit trail documenting the lot from which each cable run was installed (e.g. PO number, manufacturer's date and lot code, etc.).

PART 5 - WORK NOT INCLUDED

A. Cable tray installation.
B. Conduit sleeves.
C. Commercial AC power wiring and outlets.
D. Telecommunications grounding system.

PART 6 - REFERENCE DRAWINGS

TC-100 General Notes and Symbols
TC-101 Telecommunications Backbone Pathways Schematic
TC-102 Telecommunications Backbone Cabling Schematic
TC-103 Telecommunications Work Outlet Locations

The Contractor is specifically directed to review, and become familiar with, the Architectural ("A") and Electrical ("E") drawings to understand the full details of the project.

PART 7 - DEFINITIONS

A. "PROVIDE" or "FURNISH" means to supply, purchase, transport, place, erect, connect, test and turn over to the user, complete and ready for normal commercial operation, the cabling systems referred to in this document.

B. "SUPPLY" means to purchase, procure, acquire, and deliver the required goods and services to the locations as designed.

C. "INSTALL" means to move from property line, set in place, join, unite, fasten, link, attach, set up or otherwise connect together equipment supplied under this contract. Installation shall be considered complete when the equipment or system is ready for normal commercial operation.

D. "WIRE, WIRING" means the inclusion of all cables, fittings, conductors, connectors, connector strips, connections, terminations and cable management devices, etc. required in connection with this work.

E. "AS DIRECTED" means as directed by the Architect or his representative.

F. "CONCEALED" means embedded in masonry or other construction methods such that physical damage must to done to access the cabling or device once construction is completed.

G. "ACCESSIBLE" means an item embedded in the building construction, but for which an access method has been provided.

H. "READILY ACCESSIBLE" mean an item that may be accessed or operated without the use of special tools or equipment (e.g. ladders).

I. "EXPOSED" means installed outside of the building finish such that it is visible to the eye.

PART 8 - SUBMITTALS

A. Submit, as part of the bid, manufacturer's product data sheets for all material and equipment whose products are proposed. Only specified or accepted manufacturers or suppliers shall appear in the Product Data Submittal. The Contractor's Bid shall not be considered without a complete Product Data Submittal. Any requests for approval of substitutions for products not listed in this specification must be made prior to bid submittal.

B. Mark each data (cut) sheet to show applicable choices and options. Where product data includes information on several products, some of which are not required, mark copies to indicate the applicable information.

C. The Contractor shall submit sample reports showing the proposed format for cable test reports.

D. Acceptance of any submitted data for material, equipment, apparatus, devices, arrangement and layout shall not relieve Contractor from responsibility of furnishing same of proper dimensions and weight, capacities, sizes, quantity, quality and installation details to perform efficiently the requirements and intent of the Contract. Such acceptance shall not relieve Contractor from responsibility for errors, omissions or inadequacies of any sort on submitted data.

E. Project Documentation:
   1. Provide drawings annotated with the changes made during the installation of the work performed.
   2. Provide the Architect with two (2) sets of all manufacturer's literature and data sheets in a high quality, 3-ring binder, completely indexed not more than 1 week after project completion.
   3. Upon completion of work and acceptance by OEM, provide annotated drawings showing the exact location and type of each cable termination point.

PART 9 - *QUALITY ASSURANCE*

A. Contractor is solely responsible for quality control of the Work.

B. All materials furnished shall be new, unused, clean, undamaged, free of corrosion and free from mechanical or electrical defects.

C. All materials shall meet all applicable codes provided a standard has been established for the material in question.

D. The installation shall comply fully with all government authorities, laws and ordinances, regulations and codes applicable to the installation.

E. Should any change in plans or specifications be required to comply with governmental regulations, the Contractor shall notify the Architect at the time of submitting the construction schedule.

F. No splices shall be allowed between cable termination points.

G. The Contractor must carefully check space requirements and the physical confines of the area of work to insure that all material can be installed in the designated spaces including raceways and cable supports.

H. Transmit to other Contractors all information required for work to be provided under their respective Sections in ample time for installation.

I. *Wherever work interconnects with, or contacts, the work of other trades, the Contract shall coordinate his work with other Contractors to insure that all trades have the information necessary so that they may properly install all the necessary connections and equipment.*

J. *Due to the fast-track nature of this project, strong coordination with all Contractors is required to properly install the cabling system.*

Notes:

1. The Contractor is specifically directed to check all field conditions before starting work to ensure that field conditions have not changed.

PART 10 - DELIVERY, STORAGE AND HANDLING

A. All materials (except bulk materials) are to be delivered in manufacturer's unopened containers, fully identified with manufacturer's name, trade name, type, class, grade, size and color as appropriate.

B. Materials shall be suitably sheltered from the damage and theft, but readily accessible for inspection by the Architect until installed. Store all items subject to moisture damage in dry, clean spaces.

C. The Construction Manager will try to accommodate Contractor's reasonable request for on-site storage space. Storage space will be assigned by the Construction Manager on a space available basis and is not guaranteed. Contractor must submit a request for on-site storage space with his bid response.

PART 11 - WARRANTY/EXTENDED WARRANTY PROGRAM

A. The Contractor shall provide, in writing, a minimum of a one-year (1-year) *no-cost* warranty policy against materials and workmanship supplied under this contract.

B. The Contractor may propose extended warranty as an add alternate.

PART 12 - PRODUCTS

A. Where particular items are explicitly identified in the specification or indicated on the drawings for a specific application, the Contractor is to use only those products or materials.

B. Only substitutes approved in writing, before installation, by the Architect or the Architect's designated representative may be used as alternative products.

C. Part numbers provided in this section are believed to be correct. However, if the listed part number has been changed, discontinued or superseded, the Contractor is responsible for bringing this to the Architect's attention so that approval may be obtained for currently available products. Should a particular part number prove to be invalid, the Contractor shall provide the Architect with product data sheets and specifications for the suggested alternate.

D. Section 12, PART NUMBERS, contains a list of cables and equipment used in this project. It is the Contractor's responsibility to ensure that only the items actually specified in this Scope of Work are installed.

E. The specific manufacturers' products and part numbers listed below shall be furnished and installed under this contract. In addition, "Or Approved Equal" substitutes may be used with the written approval of the Architect or his designated representative.

F. It is the intention of this specification to establish a benchmark of quality both in the products selected, and in the performance and warranty afforded to the user upon successful completion of the cabling installation. When the Contractor exercises an option to substitute a particular component or group of components under this contract, he must provide documentation and sample product which identifies the performance and quality of the specified product.

G. Subject to compliance with the technical requirements of this section and the bid requirements provided in general Conditions, the Contractor shall provide cable and equipment from the following manufacturers.

PART 13 - PART NUMBERS

Fiber Optic Cables

A. **Twenty-four-strand (24-strand) multi-mode plenum fiber optic cable.**
Primary use: intra-building interconnection of voice or data equipment.
Supplier: Berk-Tek or approved equal
Part Number PDP6B024-CB3510/15
Description: Multi-mode fiber optic cable; 62.5 micron core, 125 micron cladding, 250 micron coating, and 900 micron buffering; minimum bend radius during installation of no less than twenty (20) times the outside cable diameter; minimum bend radius after installation of no less than ten (10) times the outside cable diameter; maximum attenuation at 850 nanometers (nm) of 3.5 dB per kilometer (km); maximum attenuation at 1,300 nm of 1.0 dB per km; minimum bandwidth of 200 MHz. at 850 nm; minimum bandwidth of 500 MHz. at 1,300 nm; numerical aperture of 0.275; reinforced with Aramid yard; no metallic elements.

Quantity to be supplied: As determined by bidder's calculations

B. **Six-strand (6-strand) single-mode plenum fiber optic cable.**
Primary use: intra-building interconnection of voice or data equipment.
Supplier: Berk-Tek or approved equal
Part Number PDP012-AB1010
Description: Single-mode fiber optic cable; 8.3 micron core, 125 micron cladding, 250 micron coating, and 900 micron buffering; minimum bend radius during installation of no less than twenty (20) times the outside cable diameter; minimum bend radius after installation of no less than ten (10) times the outside cable diameter; maximum attenuation at 1310 nanometers (nm) of 1.0 dB per kilometer (km); maximum attenuation at 1,550 nm of 1.0 dB per km; reinforced with Aramid yard; no metallic elements.

Quantity to be supplied: As determined by bidder's calculations

Fiber Optic Termination Cabinets

Primary use: to provide termination of fiber optic cables in telecommunication racks.
Supplier: Ortronics or approved equal
Part Number: OR-625MMC-24PG1B (24-port)
OR-625MMC-48PG1B (48-port)
Description: Fiber optic interconnection unit capable of terminating up to 48 simplex multi-mode fiber optic cables per cabinet; SC connectors with zirconia ferrule.

Quantity to be supplied:

Fiber Optic Patch Cords and Connectors

A. **Multi-Mode Fiber Optic Patch Cords**
Primary Use: Interconnection of equipment.
Supplier: Ortronics or approved equal
Part Number: OR-61150J62010F99C
Description: Multi-mode, ten-foot (10'), simplex, fiber optic patch cord with zirconia ferrules and SC connectors.

Quantity to be supplied: Fifty (50) pieces.

B. **Single-Mode Fiber Optic Patch Cords**
Supplier: Ortronics or approved equal
Part Number: OR-61150J08010F99C
Description: Single-mode, ten-foot (10'), simplex, fiber optic patch cord with zirconia ferrules and SC connectors.

Quantity to be supplied: Twelve (12) pieces.

C. **Fiber Optic Cable Connectors**
Primary Use: to terminate fiber optic cables.
Supplier: Amphenol or approved equal
Part Number: 954-101-5006, single-mode
954-101-5010, multi-mode
Description: Type SC fiber optic cable connectors; typical insertion loss <0.19 dB for single-mode and <0.15 dB for multi-mode fiber.

Quantity to be supplied: As required to terminate backbone cables.

Wire Management

A. **Backboard Wire Management Hardware, D-Rings**
Primary Use: to allow the installation of cables in a neat and workman-like manner.
Typical Supplier: Siemon Company
Part Number: S145, 4" Horizontal
Part Number: S146, 6" Vertical
Description: Distribution-rings; lightweight; self extinguishing; molded polycarbonate; split front.

Quantity to be supplied: as required for neat and orderly cable management.

B. **Suspended Cable Wire Management Hardware, Type 1**
Primary Use: primary method of supporting cables in ceiling areas not equipped with cable tray.
Typical Supplier: Erico (Caddy Fasteners)
Part Number: CAT425 (see data sheet for specific catalog numbers for flange, beam and purlin mounting options).
Description: Adjustable cable support loop designed to enclose up to 425 Cat. 5, UTP cables. Design prevents stress points when distributing large numbers of cables. *Installation Note:* Support loops must be mounted securely to building structural components such as the floor slab above, structural steel, or concrete beams. Do not mount support loops to ceiling panel supports, ductwork, piping, electrical conduit, trunking, or other non-structural members.

Quantity to be supplied: as required for neat and orderly cable management.

C. **Suspended Cable Wire Management Hardware, Type 2**
Primary Use: to provide support for cables in horizontal, overhead cable paths where cable tray is not available.
Typical Supplier: Erico Fastening Products
Part Number: WMX6
Description: Metallic J-hook bracket. *Installation Note:* J-hooks must be mounted securely to building structural components such as the floor slab above, structural steel, or concrete beams. Do not mount J-hooks to ceiling panel supports, ductwork, piping, electrical conduit, or other non-structural members. *Do not support more than six (6) cables from a single J-Hook.*

Quantity to be supplied: as required for neat and orderly cable management.

D. **Cable Management Straps**

Primary Use: organize and manage telecommunications cables.

Typical Supplier: Ortronics or approved equal

Part Number: OR-70700080-XX (6")
OR-70700079-XX (12")
(replace XX with desired color code)

Description: Cable straps with hook-and-loop fasteners, 0.625" wide, available in 6 colors.

Installation Note: To prevent damage, plastic cable ties shall not be used to bundle, organize or manage UTP or fiber optic cables.

Quantity to be supplied: as required for neat and orderly cable management.

Labels

Primary Use: provide permanent marking and identification of cables and components.
Typical Supplier: Panduit Corporation
Part Number: Contractor's option to meet specifications.
Description: Pre-printed, or machine printed on-site, self-adhesive, smudge-resistant labels. *Installation Note:* Labels shall be sized appropriately for the item to which it will be applied and the amount of information to be displayed. If machine-printed labels are used, no characters smaller than 10-point shall be used. For maximum legibility sans serif typefaces are preferred. When labels are applied to round objects such as cables, special attention shall be paid to ensure that the label will not unwrap itself due to stress relief. The Contractor shall apply labels as detailed on drawings and as identified on cable pull schedules to each cable, patch panel, termination block and faceplate as required. Labels shall be appropriately colored for maximum contrast.

Provide machine generated designation strips marked with the cable ID and pair number, in black uppercase lettering, on all termination blocks installed under this contract.

Attach machine-generated labels to all telecommunications cables installed under this contract. The labels shall contain the cable ID printed in black uppercase lettering on white label stock. The printed portion of the label shall be protected by a permanent, water-resistant, transparent top layer. The label shall fastened with a permanent adhesive.

Labels shall be placed on both ends of the cable not more than 6 inches from the end of the outer sheath. All labels shall be readily visible after installation of the cable.

Hand-lettered labels will not be accepted upon completion of the work required under this contract. Hand-lettered labels may only be used for temporary labeling required during installation.

If at any time during the project, a label becomes illegible, damaged or is removed, the Contractor shall immediately replace it with a satisfactory new label.

PART 14 - EXECUTION

A. Verification of Field Conditions: The Contractor shall examine the areas to receive the work and the conditions under which the work would be performed. Contractor shall remedy conditions detrimental to the proper and timely completion of the contract. The Contractor shall not proceed until unsatisfactory conditions have been corrected.

B. The Contractor shall examine and compare the Telecommunications Drawings and Specifications with the Drawings and Specifications of other trades. The Contractor shall report any discrepancies between them to the Architect and obtain from the Architect written instructions for changes necessary in the work. At time of bid, the most stringent requirements shall be included in the bid.

C. The Contractor shall install and coordinate the cabling work described in this document with the cooperation of the other contractors working on this project. Before installation the Contractor will make provisions to avoid interferences with other contractors in a manner acceptable to the Architect.

D. All repairs or changes required as a result of damage or neglect caused by the Contractor shall be correct by the Contractor to the satisfaction of the Architect at the Contractor's own expense.

E. The Contractor shall maintain a current copy of this bid specification and associated telecommunications drawings at the job site at all times.

F. The Contractor shall follow all manufacturer instructions for unpacking, installing, testing, and commissioning of cables and equipment. The Contractor shall submit two (2) copies of each instructions to the Architect before installing any cabling or equipment. If specific instructions are not available, industry standard practices and workmanlike installation standards shall be followed.

G. All cables shall be tested after termination to confirm that they meet or exceed the specifications given in this document. Test results shall be submitted to the Architect in the form of numerical values where appropriate with an optional Pass/Fail summary designation.

H. Telecommunications cables running parallel to electrical power cables or conduits shall be separated by a minimum of 12 inches whenever possible.

I. The Contractor shall ensure that all telecommunications cable supports are fully installed before proceeding with cable installation. At no times shall cables be installed and left unsupported. At no times shall cables be tie-wrapped to any other supporting structure in

lieu of specified cable supports. Do not bundle or tie-wrap the cables even within the approved cable supports.

J. Do not lay telecommunications cables unprotected on the floor at any time. If cables must be left on the floor where they are likely to be damaged from foot traffic or mechanical devices, the cables shall be protected from damage by substantial covers or platforms.

K. The cable manufacturer's recommended minimum bend radius must be maintained at all times. Do not exceed the maximum allowable pulling tension when installing the cable. Do not tightly coil, sharply bend or tightly crimp cables. If the Architect believes that cables have been subjected to potential damage during installation, the Architect shall document such damage and require the Contractor to replace the designated cables.

L. Keep all items protected before and after installation from dust, dirt and moisture. It shall be the contractor's responsibility to ensure the integrity of these protective measures throughout the life of the project.

M. At all times during the work required under this contract the Contractor shall protect all telecommunications equipment from damage including vandalism. Equipment in the telecommunications closets shall not be installed until such time as other trades have completed their work in that area so that the equipment will not be moved or damaged.

N. The Contractor shall maintain all areas related to his work in a clean and orderly manner. Debris generated by the Contractor shall be disposed of properly at the end of each shift.

O. Upon project completion, the Contractor shall provide as-built drawings and documentation as defined herein.

P. There shall be no splices or mechanical couplers installed between the cable points of origin and termination.

Q. Installation personnel shall be qualified to perform the work required. The Architect reserves the right to have the Contractor remove or replace any of the Contractor's personnel at its sole discretion. Whenever possible technicians certified by the manufacturer of the equipment shall perform the work required under this contract. The technicians shall be knowledgeable of the following:

1. Cable color coding
2. Bonding and grounding technology
3. Cable testing techniques and test equipment
4. Cable termination, connectors, and splicing
5. Generally accepted industry standards and practices

PART 15 - FIELD QUALITY CONTROL

A. After the installation is complete the Contractor shall perform testing to demonstrate that the installation meets the specifications in this document. The Contractor shall notify the Architect at least two (2) business days in advance of the start of testing so that the Architect or his designated representative may be present during the testing if the Architect so desires. Any defects revealed shall be corrected promptly at the Contractor's expense and the tests performed again.

End of Specification

TABLE 3-4. ADDITIONAL WIRING REQUIREMENTS

Room	Sensor /device description	Wire Required	Wire #	To Panel	Panel Location
	PIR IN MENS ROOM	1 PR 18 AWG SHIELDED	264	AMP 10-4	RM 23-50
	DUCT ALARMS 7FL	2 PR 18 AWG SHIELDED	365	ACS 52-5	RM 7-XX
	PIR IN WOMENS ROOM	1 PR 18 AWG SHIELDED	313	AMP 30-3	RM 23-50
23-10	DUCT ALARMS FROM ROOM 10	1 PR 18 AWG SHIELDED	337	AMP 32-4	RM 23-18
23-04	DUCT ALARMS FROM ROOM 04	1 PR 18 AWG SHIELDED	338	AMP 32-5	RM 23-18
23-03	DOOR #02D CONTACTS	1 PR 18 AWG SHIELDED	339	AMP 32-6	RM 23-18
23-40	RECPT. DESK DOOR 40A RELEASE	1 PR 18 AWG SHIELDED	28	CRI C	RM 23- 18
23-40	RECPT. DESK DOOR 40B RELEASE	1 PR 18 AWG SHIELDED	29	CRI C	RM 23- 18
23-40	RECPT. DESK DOOR 01B RELEASE	1 PR 18 AWG SHIELDED	18	CRI B	RM 23-50

2.3 Specific Materials to be supplied

The following list of Electronic Security equipment is to be purchased from Vikonics, Inc. and installed per the Manufacturer's instructions. This list does not include wire, installation materials, etc. which are to be supplied by the Contractor.

TABLE 2-9. ELECTRONIC SECURITY BILL OF MATERIALS

Model	Description	Qty	Manufacturer
VISID$ 3500 (w/ 15" monitor)	Main Security CPU	1	Vikonics
VISID$ 3550 (w/ 15" monitor)	Terminal CPU (workstation)	3	Vikonics
TAC/NCM-B	Front End Processor	Inc.	Vikonics
VP-3570	Network Hub	1	Vikonics
VP-2260	Multiplexer	3	Vikonics
VP-3110	Dot Matrix Printer	2	Vikonics
VRU-2004	Card Reader Interface	5	Vikonics
VP-2508	8 Zone ACS Panel	4	Vikonics
VP-2216	16 Zone Alarm Monitor Panel	1	Vikonics
VP-2232	32 Zone Alarm Monitor Panel	1	Vikonics
LVPS-40	Power Supply	2	Vikonics
VP-1064	Intelligent Keypad	4	Vikonics
VRP-5310	Proximity Reader	14	Vikonics
VRP-5310 + VRI-2130	Proximity Reader w/Keypad	5	Vikonics
V2000-T	Transformer	9	Vikonics
VA-040	Exit Button	4	Vikonics
VA-034	Door Contact	67	Vikonics
VA-04-0470	BMS w/ Resistor	1	Vikonics
VIR-1000	Motion Detector	15	Sentrol
VA-055	End of Line Resistor Network	72	Vikonics
VCP-1365	Access Cards	200	Vikonics
Monarch	Photo Badging System	1	Vikonics
BK240, B401	Smoke Detector & Base	1	System Sensor
US-HUB2A	Duress Switch	1	United Security Prods
VA-FA416	Duress Receiver	3	Inovonics
VA-FA204	Portable Duress Alarm	3	Inovonics
VA-VIB	Vibration Sensor	1	Potter Electric
	Console	1	Vikonics
	Duct Alarms	LOT	Vikonics

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PAI 6/2

BUCKSLIP

TO: RON PISAPIA
FROM: JEFF GERTLER
DATE: MAY 8, 1998
SUBJECT: REVIEW BY APPOINTMENT
MAYOR'S OFFICE OF EMERGENCY RESPONSE
TAA 987.134

Copy: G. Gaeta, K. Piatt, J. Picone

I am requesting a review by appointment on Wednesday MAY 13th, early morning. The drawings will be in your hands before 9:00am that day.

Attached in the drawing list provided by the Architect.

Please call me to confirm this date and time. I can be reached on ext. 4531.

Thank You

PORT AUTHORITY OF N. .
ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS
MAY - 8 1998
W98-7134 (2)
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

OFFICE COPY

SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
NY, NY 10048

SHCA Project No. 5576A
May 7, 1998

LIST OF DRAWINGS
Issued for P.A.review

DRAWING NUMBER	DRAWING TITLE	ISSUE DATE
T-1	TITLE SHEET	5/4/98
A-EG-23	23RD FLOOR EGRESS PLAN	5/13/98
1ST FLOOR		
A-1-1	PART 1ST FLOOR CONSTRUCTION PLAN	5/13/98
7TH FLOOR		
A-7-1	PART 7TH FLOOR CONSTRUCTION PLAN	5/4/98
23RD FLOOR		
A-23-1	23RD FLOOR PARTITION PLAN	5/4/98
A-23-2	23RD FLOOR REFLECTED CEILING PLAN	5/4/98
A-23-3	23RD FLOOR POWER, TELEPHONE AND EQUIPMENT PLAN	5/4/98
A-23-4	POWER AND TELEPHONE LOCATION PLAN	5/4/98
A-23-5	FINISH PLAN	5/4/98
A-23-6	FURNITURE PLAN	5/4/98
48TH FLOOR		
A-48-1	PART ROOF / RADIO ROOM CONSTRUCTION PLAN	5/4/98
D-0	PARTITION TYPES, DOOR TYPES & DETAILS	5/4/98
D-1	NEW BATHROOMS & PANTRIES PART PLANS, ELEVATIONS AND DETAILS	5/4/98
D-2	ELEVATIONS & MILLWORK SECTIONS & DETAILS	5/4/98
D-3	A/V ENCLOSURES ELEVATIONS AND DETAILS	5/4/98
D-4	ELEVATIONS AND DETAILS	5/4/98
D-5	DETAILS	5/4/98
D-6	DETAILS	5/4/98
D-7	DETAILS	5/4/98
D-8	DETAILS	5/4/98
D-9	DETAILS	5/4/98
D-10	PART PLAN AND DETAILS	5/13/98
D-11	EOC WORK STATION DETAILS	5/4/98
D-12	TYPICAL - EXTERIOR DETAIL	5/4/98

Swanke Hayden Connell Ltd. / Swanke Hayden Connell Partners LLP
295 Lafayette Street, New York, New York 10012
212 226-9696, Fax 212 219-0059

[redacted]
SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
NY, NY 10048

SHCA Project No. 5576A
May 7, 1998

LIST OF DRAWINGS

Issued for P.A.review

DRAWING NUMBER	DRAWING TITLE	ISSUE DATE
MECHANICAL		
M1-01	1ST FLOOR HVAC PLAN	5/13/98
M1-07	7TH FLOOR HVAC PLAN	5/13/98
M1-23	23RD FLOOR HVAC PLAN	5/13/98
M4-01	ROOF PART PLAN, NOTES AND DETAILS	5/13/98
ELECTRICAL		
E-001	SYMBOL LIST	5/13/98
E-1.01	1ST. FLOOR PLAN	5/13/98
E-1.23	23RD FLOOR PLAN - POWER	5/13/98
E-3.01	POWER RISER DIAGRAM	5/13/98
E-4.01	SCHEDULE & DETYAIL NO. 1	5/13/98
E-4.03	SCHEDULE & DETYAIL NO. 2	5/13/98
FIRE PROTECTION		
FP3.23	FIRE PROTECTION 23RD FLOOR PLAN	5/13/98
FP4.23	FIRE PROTECTION PRE-ACTION NOTES, SCHEDULES & DETAILS	5/13/98
FP5.23	FIRE PROTECTION SPECIFICATIONS, NOTES, KEY OF SYMBOLS, SCHEDULE & LIST OF DRAWINGS	5/13/98
STRUCTURAL		
S-1	1ST FLOOR FARMING PLAN	5/13/98
S-2	7TH FLOOR FARMING PLAN	5/13/98
S-3	23RD FLOOR FARMING PLAN	5/13/98
S-4	ROOF PART FARMING PLAN	5/13/98
S-5	SECTIONS	5/13/98
TELECOM		
TC-101	TELECOMMUNICATIONS BACKBONE PATHWAYS SCHEMATIS	5/13/98
SEC. 15700B	FIBER OPTICS TELECOMMUNICATIONS CABLE PLANT SPECIFICATIONS	5/13/98
SECURITY		
028Z001	RISER DIAGRAM	5/13/98
028L002	SECURITY EQUIPMENT LOCATION	5/13/98
038L003	SECURITY EQUIPMENT DETAILS	5/13/98
038L005	SECURITY EQUIPMENT CONSOLE	5/13/98

Swanke Hayden Connell Ltd. / Swanke Hayden Connell Partners LLP
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212 226-9696, Fax 212 219-0059

MAY-07 98 19:44 FROM:SHCA LTD TO:9435816B PAGE:03/04

SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York 10048

SHCA Project No. 5576A
May 7, 1998

Specification Table of Contents
Issued for P.A. Review

SECTION NO.	SPECIFICATION SECTION	ISSUE DATE
HVAC		
	SUPPLEMENT TO SPECIFICATIONS	5/13/98
FIRE PROTECTION		
	SUPPLEMENT TO SPECIFICATIONS	5/13/98
TELECOMMUNICATIONS		
17600B	Copper and Fiber Optic Telecommunications backbone Cable Plant Specification	5/13/98
STRUCT'L CALCULATIONS		
	Structural Calculations	5/13/98

Swanke Hayden Connell Ltd. / Swanke Hayden Connell Partners LLP
295 Lafayette Street, New York, New York 10012
212 226-9696, Fax 212 219-0059

W:\5576\docs\PA CD 05-07-98.xls SPECS
Page 1

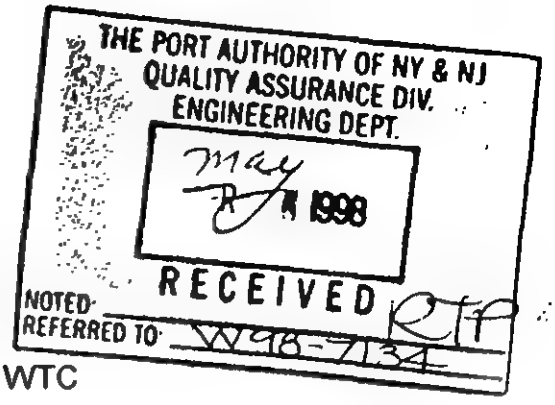
MAY-07 98 19:44 FROM:SHCA LTD TO:94358168 PAGE:04/04

THE PORT AUTHORITY OF NY & NJ

ONE WORLD TRADE CENTER
NEW YORK, NY 10048

(212) 435-7000
(973) 961-6600

April 30, 1998



Mr. Joseph Aliotta
Swanke Hayden Connell Architects
295 Lafayette Street
New York, N.Y. 10012

RE: MAYOR'S OFFICE OF EMERGENCY RESPONSE - 7 WTC
TAA 987134 - SUBMISSION NO. 1
LIMITED EARLY START OF CONSTRUCTION

Dear Mr. Aliotta

By receipt of this letter you are authorized to proceed with the limited portion of the work shown on the Contract Drawings and Specifications for this Tenant Alteration Application. The early start of construction shall be limited to the following items:

A. CONSTRUCTION PREPARATION

1. Construction surveys and measurements of existing construction to prepare contract drawings and shop drawings.

2. Layout for electric and telephone outlets, partitions, doors, openings, and other layout appropriate for preparation of construction.

B. CONSTRUCTION WORK OFF SITE

Fabrication of equipment, piping, cables, cabinets, enclosures, and other materials. None of the fabrications may be delivered to the site, or installed except where specifically noted in Sections "C" and "D" below or until the Tenant Alteration Application is approved. Any of the fabricated materials shall be revised or replaced where they are in conflict with the requirements of the final approved drawings and the Tenant Alteration Application. Any such revision or replacement shall be done at the sole expense of Mayor's Office of Emergency Response.

C. PERMITTED DEMOLITION AND REMOVAL OF EXISTING CONSTRUCTION

1. Non-rated partitions, full or partial height.

2. Demising walls (rated) may be demolished with written approval of the World Trade Center Resident Engineer. Proposals for such demolition will be addressed on an individual basis.

3. Suspended lightweight ceiling systems.

4. Light fixtures.

5. Tenant air conditioning systems, including chilled water and electricity. Such demolition may not interrupt services to public spaces or occupied areas.

6. Electrical and telephone service may be demolished back to telephone and electric closets.

7. Removal of carpeting and underlayment, resilient or ceramic floor tile. Please note: Although this is not an asbestos project, vinyl asbestos tile (VAT) is present under the carpet/raised floor. The Tenant's contractor must exercise extreme care in removing the carpet and raised floor support post(s) during the demolition to minimize the disruption of the VAT. VAT so disturbed must be removed by a licensed abatement contractor. If the Tenant requires the removal of all the VAT, a separate Tenant Alteration Application must be submitted and the limited early start of construction is placed on "hold" until such abatement is complete.

8. Cabinets, shelving, paneling and other non-structural finishes.

D. PERMITTED CONSTRUCTION AND STORAGE

1. Non-combustible materials and equipment may be accepted for storage provided that placement of all such items is as directed by the World Trade Center Resident Engineer and that such storage does not exceed fifty-five pounds per square foot.

2. Partition floor channels.

3. Partition ceiling channels.

4. Partition studs.

5. Sheetrock on one side of partition(s), following approval of the egress plan.

6. Patch fireproofing and insulation, if accessible without additional work.

All work shall be performed in accordance with New York City Building Code, the National Electrical Code, and Port Authority Requirements.

The Mayor's Office of Emergency Response understands that the limited early construction indicated herein is being allowed by the Port Authority prior to the complete review and approval of the Tenant Alteration Application and contract drawings for this work.

By undertaking such early construction, The Mayor's Office of Emergency Response assumes any and all risk and expense related thereto, including the risk that the Tenant Alteration Application and contract drawings, once approved by the Port Authority, may necessitate the modification of shop drawings and the modification or removal of any early construction undertaken. The approval of any early construction is conditioned on your acceptance of these terms, and the initiation of such early construction by The Mayor's Office of Emergency Response constitutes your acceptance of such terms and conditions.

The certifying Licensed Professional and Contractor referred to in Rider "C" shall contact Mr. Joseph Napolitano at (212) 435-7285, 72 hours prior to the start of construction for a pre-construction meeting to discuss work scheduling and compliance with specific Port Authority requirements pertaining to construction work that will be performed on the premises.

Swanke Hayden Connell Architects
TAA 987134

April 30, 1998

All correspondence and inquiries should be directed to: Mr. Jeffrey Gertler, at One World Trade Center, 88 South, NY, NY 10048, telephone (212)435-4531.

Sincerely,

Gerard Gaeta
Supervisor
Landlord Base Building Programs

cc: Walter Weems, 7 WTC, Building Manager

bcc: D. Bergstein, B. Colendenski*, G. Donohue, A. Fadavi, J. Gertler, L Menno, J. Napolitano, K. Piatt, J. Picone, R. Pisapia**, J. Protas, N. Seliga, Central File*, Chrono File*

Attachment A - List of Documents
TAA 987134
Mayor's Emergency Management Office

Drawing No.	Title	Date
T-1	Title Sheet	04/06/98
Egress		
A-EG-23	23rd Floor Egress Plan	04/06/98
1st Floor		
A-1-1	Part 1st Floor Construction Plan	04/06/98
7th Floor		
A-7-1	Part 7th Floor Construction Plan	04/06/98
23rd Floor		
A-23-1	23rd Floor Partition Plan	04/06/98
A-23-2	23rd Floor Reflected Ceiling Plan	04/06/98
A-23-3	23rd Floor Power, Telephone and Equipment Plan	04/06/98
A-23-4	Power and Telephone Location Plan	04/06/98
A-23-5	Finish Plan	04/06/98
A-23-6	Furniture Plan	04/06/98
48th Floor		
A-48-1	Part Roof/Radio Room Construction Plan	04/06/98
D-0	Partition Types, Door Types & Details	04/06/98
D-1	New Bathrooms & Pantries Part Plans Elevations and Details	04/06/98
D-2	Elevations & Millwork Sections & Details	04/06/98
D-3	A/V Enclosures Elevations and Details	04/06/98
D-4	Elevations and Details	04/06/98
D-5	Elevations and Details	04/06/98
D-6	Details	04/06/98
D-7	Details	04/06/98
D-8	Details	04/06/98
D-9	Details	04/06/98
D-10	Part Plan and Details	04/06/98
D-11	EOC Work Station Details	04/06/98
D-12	Penthouse Elevations & Typical Exterior Details	04/06/98
BFI		
	Work Station Plan 23rd Floor	04/06/98
	Enter GY/ Panel Plan 23rd Floor	04/06/98

Attachment A - List of Documents
TAA 987134
Mayor's Emergency Management Office

Drawing No.	Title	Date
Mechanical		
M1-01	1st Floor HVAC Plan	04/06/98
M1-07	7th Floor HVAC Plan	04/06/98
M1-23	23rd Floor HVAC Plan	04/06/98
M4-01	Roof Part Plan, Notes and Details	04/06/98
Electrical		
E-001	Symbol List	04/06/98
E-1.01	1st Floor Plan	04/06/98
E-1.07	7th Floor Plan, Lighting, Power and Signal	04/06/98
E-1.23	23rd Floor Plan - Power & Signal	04/06/98
E-2.23	23rd Floor Plan - Lighting	04/06/98
E-1.48	Roof Plan	04/06/98
E-3.01	Power Riser Diagram	04/06/98
E-4.01	Schedule & Details Sheet #1	04/06/98
E-4.02	Schedule & Details Sheet #2	04/06/98
E-4.03	Schedule & Details Sheet #3	04/06/98
E-6.01	Motor List	04/06/98
E-6.02	Motor Notes	04/06/98
Plumbing		
P1.01	Plumbing 1st Floor Plan	04/06/98
P2.07	Plumbing 7th Floor Plan	04/06/98
P3-23	Plumbing 23rd Floor Plan	04/06/98
P4.23	Plumbing Notes, Schedules, Key of Symbols	04/06/98
P5.23	Plumbing Riser Diagrams	
Fire Protection		
FP1.01	Fire Protection 1st Floor Plan	04/06/98
FP2.07	Fire Protection 7th Floor Plan	04/06/98
FP3.23	Fire Protection 23rd Floor Plan	04/06/98
FP4.23	Fire Protection Pre-Action Notes, & Details	04/06/98
FP5.23	Fire Protection Specification, Notes, Symbols, Schedule List of Drawings	04/06/98
FP6.23	Fire Protection Riser Diagram	04/06/98

Attachment A - List of Documents
TAA 987134
Mayor's Emergency Management Office

Drawing No.	Title	Date
OEM		
S-1	1st Floor Framing Plan	04/06/98
S-2	7th Floor Framing Plan	04/06/98
S-3	23rd Floor Framing Plan	04/06/98
S-4	Roof Part Framing Plan	04/06/98
S-5	Sections	04/06/98
Audio/Visual		
AV-1	23rd Floor A/V Facilities Plan Operation Center	04/06/98
AV-2	23rd Floor A/V Facilities Plan Mayor's/ Commissioner's Suites	04/06/98
AV-3	23rd Floor A/V Facilities Plan Watch Command & Press Room	04/06/98
AV-4	A/V Facilities Plan PIU/Training Room	04/06/98
AV-EO	23rd Floor A/V Electrical Symbols A/V Electrical	04/06/98
AV-E1	Audio/Visual Operations Center	04/06/98
AV-E2	23rd Floor A/V Facilities Plan Mayor's/ Commissioner Suites	04/06/98
AV-E3	23rd Floor A/V Electrical Plan Watch Command & Press Room	04/06/98
AV-E4	A/V Electrical Plans PIU/Training Room	04/06/98
AV-E5	23rd Floor A/V Head End Signal Distribution Coaxial Cable Backbone	04/06/98
AV-S1	23rd Floor Operations Center RGB/Video Functional Diagram	04/06/98
AV-S2	23rd Floor Mayor's Conference Room RGB/ Video Functional Diagram	04/06/98
AV-S3	23rd Floor Master Audio System Functional Diagram	04/06/98
AV-S4	23rd Floor PIU/Training Room RGB/Video Audio Functional Diagram	04/06/98
AV-S5	23rd Floor Mayor's/Commissioner's Suites Audio Functional Diagrams	04/06/98
AV-S6	Press Feed System Distribution Audio/Video Functional Diagram	04/06/98
AV-S7	RF Distribution/Head End System	04/06/98
AV-S8	Master Control System/Control System	04/06/98

Attachment A - List of Documents
TAA 987134
Mayor's Emergency Management Office

Drawing No.	Title	Date
Telecommunications		
TC-100	General Notes and Symbols	04/06/98
TC-101	Telecommunications Pathways Schematies	04/06/98
TC-103	Telecommunications Cable Distribution Pathway	04/06/98
TC-103A	Technology Room Details	04/06/98
TC-103B	Telecommunications Outlet Locations	04/06/98
Security		
038Z001	Riser Diagram	04/06/98
038L002	Security Equipment	04/06/98
038L003	Security Equipment Details	04/06/98
038L005	Security Equipment Console	04/06/98

End of Drawings
04/30/98

Attachment B - List of Comments
TAA 987134
Mayor's Emergency Management Office

GENERAL

1.(Q) Drawing T-1. Provide a note regarding Controlled Inspection. All items subject to controlled inspection shall be listed on the plans in compliance with NYC Building Code Sections 27-132, 27-136 and PA Tenant construction Review Manual (TCRM) 1997, Section 14.III.b.

ARCHITECTURAL

2. Drawing A-EG-23:

a) Provide a note that all work shall conform to the latest edition of NYC Building Code and requirements of the PANYNJ. See PA Tenant Construction Review Manual, 1997.

b) Please add a note regarding construction classification of the building, as per NYC Building Coe Section 27-269.

Please add the following notes after verification:

c) The proposed design complies with the requirement of the Federal "American with Disabilities Act (ADA), PL-101-336.

d) All Wood and wood products shall be fire retardant and labeled accordingly, as per NYC Building Code Section 27-328.

3.(Q) Drawing A-1-1:

a) Provide an approved assemble numbers for the four hour rating for concrete floor, 8" concrete block wall and fireproofing over deck and beams. See NYC Building code Section 27-322.

b) Provide a rated hatch at the elevated slab to maintain the integrity of the rated construction, as per NYC Building Code Section 27-342.

c) Revise the note at Part Plan - Mezzanine "New full height CMU (4HRS)" instead of 3 HRS as stated on the drawing.

d) Extend the 4 hour rated wall above the platform, down to the main floor and modify all doors to match fire rating of the enclosure. Also, all structural members, including columns shall be 4-hour fire rated.

ARCHITECTURAL (continued)

e) Penetration through rated construction. Please provide on the Drawing a detail or note that clearly defines the method by which the fire-rating of construction is maintained when penetrated by ducts, pipes, conducts, etc., as per Code Section 27-343. Please note that responsibility for design or code compliance shall not be delegated to the contractor, as per PA TCRM, Section e(III).

4.(Q) Drawing A-7-1. Please provide occupancy group of the space left of column 19 and right of column 24 and indicate proper fire resistance rating for walls separating these spaces from the Pump and Generator Room, as per NYC Building Code Section 27-240 and Table 5-1 or 5-2.

5.(Q) Drawings A-23-1 and A-23-5:

a) Please separate the Computer Equipment Room, from the adjacent area with a one-hour fire resistant partition. See NFPA 75, Chapter 3.

b) All door openings in rated partitions shall be protected with a rated door assembly to maintain the integrity of the fire partition.

c) Finish Schedule. Submit specification and MEA or BS&A resolution of approval for the following items, as per NYC Building Code Sections 27-131 and 27-348. Please note that manufacture's data is not a substitute for a certificate of acceptability:

i) All Ceiling Titles
ii) Wall Veneer
iii) Faux wood panel
iv) Fabric wall covering and fabric wrapped panels
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d) Submit test reports for the carpets from an independent registered testing laboratories in compliance with the NYC Building Code Section 27-351(d)(2).

6.(Q) Drawing A-23-2. Please revise the exit sign arrow near Door 37 in Corridor "C", in the direction of exit. See NYCBC Section 27-383.

ARCHITECTURAL (continued)

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a) Card Reader. Submit BS&A or MEA resolution of approval for all card reader device and locking device to be installed in all exit doors. See NYCBC Section 27-131.

b) Partition Types. Please provide an approved assembly number for all rated partitions. See NYCBC Section 27-322.

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a) Please provide clear maneuvering space inside Toilet Rooms 23-31, 23-32, and 23-48 so a handicapped person can close the door with minimum effort. See ADA Section 4.2.3.

b) Revise minimum distance of 15" from wall to center line of lavatory. Comply with ADA Section 4.19.

c) Side Grab bar at water closet. Provide 42" long grab bar at side wall, as per ADA Section 4.17.6 and Figure 29.

d) Please provide proper elevations of all fixtures and accessory used by handicapped persons, to comply with ADA Code.

e) The curb at the handicapped shower stall shall comply with ADA Code Section 4.21.7.

ARCHITECTURAL AND ELECTRICAL

9.(Q) Vikonics Drawings 038Z001 and 038L003. Doors 40A, 40B, 21C, 05, and 13 have been identified as having magnetic locks. In coordination with the Architectural design, investigate all electrically operated locks on doors that are in the path of egress, and show that those doors are readily openable, without delay, at all times from the side from which egress is to be made, and shall not require a key, card, or code to operate from that side.

a) An egress button, such as shown for Door Type D, for example, does not meet the above egress requirement.

ARCHITECTURAL AND ELECTRICAL (continued)

b) The release means for he magnetic locks shall interrupt the magnetic lock circuit directly, without reliance upon a computer or other unapproved control system. An interposing relay that has been approved for the purpose may be used in the lock circuit, and may be required if the switch contacts are not rated to interrupt the magnetic lock circuit current.

c) Also submit the MEA or BS&A approval resolutions covering the components of the locked door system.

See NYC Building Code Section 27-371(j)(1)a.

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ELECTRICAL (continued)

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MECHANICAL

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20.(Q) Drawing M1.01. The horizontal portion of the fuel oil piping shall be enclosed in a sleeve of other piping of at least number 10 manufacturer's standard gauge steel, two sizes larger than the fuel pipe therein. Clarify whether the conduits indicated on the Fuel Piping Schematic are of 10-gauge steel as required by the Code, Section 27-829(f)(2).

MECHANICAL (continued)

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22.(Q) Drawings M1.01 and M1.07. Clarify whether the existing risers being utilized for the new fuel oil lines is schedule 40 seamless steel and enclosed exclusively, containing no other pipes or ducts, in a shaft constructed of 4-inch concrete or masonry. The shaft shall be provided with a drainpipe at its base that leads to an open sight drain or open sump. See Code Section 27-829(f).

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24.(Q) Drawing M1.07, Emergency Generator Schematic Diagram Diesel Fire, Indoor Installation. Specify the capacity of the "Tank/Rupture Basin," that it equals at least twice the capacity (275 gallons) of the fuel oil day tank. Clarify also where the "Basin Detail" is shown, as mentioned on the drawing.

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26.(Q) Drawing M1.23. Show all the fire dampers, smoke dampers or combination fire/smoke dampers, existing or new, in the ducts that penetrate the new fire rated construction as required by the Code, RS 13-1, Section 3-3.7.2 and the NYC Department of Buildings, Technical Policy and Procedure Notice #6/96. See Drawing A-23-1 for location of all fire rated walls.

27.(Q) Specification Manual, Section 15120, paragraph 1.1A5. Clarify whether the acoustical treatment of the exhaust plenum for the emergency generators poses hazardous conditions due to the perforations of the inner shell and the ability of the material used or lining to withstand high temperature generated by the internal combination engine exhaust. Submit copy of the BS&A or MEA resolution of approval for the material specified in Section 15140, Paragraph 1.1A for the acoustical lining.

MECHANICAL (continued)

28.(Q) Specification Manual, Section 15190, Paragraphs 1.3F and 1.3H. PVC material shall not be used above ground and inside the building. In addition, drift eliminators shall be noncombustible since conditions of Code Sections 27-337(i)(3) and (4) are not met.

29.(Q) Specification Manual, Section 15190, Paragraph 1.4E2. Clarify whether the 3-inch calcium silicate insulation is adequate to limit the surface temperature of the engine exhaust pipe and muffler to not more than 200oF as required by Code Section 27-869(a)(4).

STRUCTURAL

30.(Q) The locations and loads of each piece of machinery and equipment having a weight in excess of one thousand pounds shall be noted on the drawings. Code Section 27-157(b)(3).

31.(Q) Where the existing beams are used to support the new loads, indicate on the drawings their sizes, stud arrangement, and ASTM designation.

*32.(Q) Drawing A-1-1, First Floor Construction Plan:

a) Trench Note on the Plan and Detail 2. Verify with calculations that the existing construction will not be overstressed due to the new trench cut in the existing slab.

b) Submit details of concrete wall and enclosure for 50 gallons drum.

c) Details 6 and 7, New Mezzanine. Submit structural design and details verified with calculations of the new Mezzanine construction. Also, investigate the adequacy of the ground floor slab to support the platform columns.

d) Detail 6. Indicate the height of the new masonry wall, and show how it is braced.

33.(Q) Drawing A-7-1:

a) Demolition Notes. Please add the following note: All demolition work to be in compliance with Article 6, Subchapter 19 of the NYC Code "Demolition Operations".

b) Details 4 and 6. Indicate how new curbs are anchored to the slab below.

STRUCTURAL (continued)

*34.(Q) Drawing A-23-1. Submit calculations to show that the existing construction is not overstressed under the added loads in the new Storage Room 23-24, Libraries 23-28 and 23-18, File Room 23-20, LAN Room 23-23, and Vault Room 23-16.

35.(Q) Drawings A-23-2 and A-1-1, Details 4 and 5. Submit design and details of all types of suspended ceilings where the sizes, spacing, and connection details for all members of the ceiling framing are indicated, including connections between hangers and construction above. See Code RS 5-16 and Tenant Construction Review Manual (TCRM) Attachment S2.

36.(Q) Drawing D-0, Detail 10. Please indicate on the plans where partition Type 10 is used.

37.(Q) Drawing D-3, A/V Enclosures:

a) Indicate loads on the existing floor from the new construction.

b) Submit details of the screen bracing.

c) Indicate how the new steel posts are anchored to the existing slab.

38.(Q) Drawing S-3:

a) Indicate sizes of the new framing between column lines 33 and 35.

b) Note 3. Submit details of the new 1/2" reinforcing plate.

39.(Q) Drawing S-4, Part Plan at Roof:

a) Indicate sizes of the roof framing.

b) Clarify how the two posts, located between corner posts, are braced in North-South direction.

40.(Q) Drawing S-5:

a) Section 2:

i) Indicate how the new W6 are connected to the existing framing.

STRUCTURAL (continued)

ii) Submit braces connection details or indicate forces in them for connection design purposes.

iii) Section 3. Submit column's base plate and anchor bolts detail, verified with calculations.

b) Typical detail for Antenna support. Indicate location of this support on the plan.

*41.(Q) Structural Calculations:

a) It is noted that calculations were submitted only for the new work on the 7th floor and the 23rd floor between column lines 08 and 11. Please submit calculations for the rest of the structural work shown on Drawings S-1, and S-3 through S-5.

b) Submit calculations to verify that the existing columns are not overstressed due to the added loads.

c) The existing floor beams were checked for vertical loads only. Please clarify if they are part of the lateral load resisting system and include the effects of lateral loading in the design, if necessary.

d) For composite beams verify that the existing stud arrangement are adequate for the new loading conditions.

e) For the existing beams used to support the new loads, investigate if the existing connections are adequate for the revised loading conditions.

f) 7th Floor Calculations. Include in the design weight of Fuel Oil Day Tank, shown on Section 6/A-7.1.

g) 23rd Floor Calculations. Include in the design weights of AC units shown in the Schedule on Drawing M4.01.

FIRE PROTECTION

42.(Q) Specification Section 15305:

a) Subsection 1.1C.7: Revise to read "Prepare and submit to the Port Authority, as set... acceptable to the Port Authority."

FIRE PROTECTION (continued)

b) Subsection 1.6A.3: Revise to read "...as required by the NYC Building Code, and by PA Tenant Construction Review Manual, Attachment S3."

43.(Q) Specification Section 15310, Subsection 2.1.A: Revise to read "...in accordance with NYC Building Code Reference Standards RS 17-1 and 17-2."

44.(Q) Specification Section 15330:

a) Subsection 1.1D: Revise third sentence to read "...and Ordinary Hazard areas in NYC Building Code Reference Standard RS 17-2." Delete "Fire Department" in the fourth sentence.

b) Subsection 2.4.D: Revise first sentence to read "...in accordance with NYC Building Code Reference Standard RS 17-2 (1989 Edition NFPA 13) Section 3-11.7."

45.(Q) Sprinkler Specification 15340, Subsection 1.4A. Drawing FP4.23, Pre-action sprinkler systems single Interlock type with Electrical Release 1.B. requires 10 years of experience. Coordinate and revise accordingly.

*46.(Q) Drawing FP1.01. The drawing shows sprinkler protection underneath the new tank floor. Please provide sprinklers for the space above the new tank floor also, to protect the new oil tank.

47.(Q) Drawing FP2.07. Provide full sprinkler protection in the proposed OEM space, including the new Generator and Tank Room.

48.(Q) Drawing FP3.23:

a) Sprinkler layout exceeds 120 sf per head for ordinary hazard in Sprinkler Specification 15305, Subsection 1.8C.1, and 150 sf per head for light hazard in Sprinkler Specification 15305, Subsection 1.8C.2. Coordinate and revise accordingly.

b) Submit signed and sealed hydraulic sprinkler calculation.

FIRE PROTECTION (continued)

49.(Q) Drawing FP4.23, Pre-action Sprinkler System Description and Sequence of Operations (Items 2.B and 3), Pre-action System Assembly Detail, and Pre-action Fire Sprinkler System Electrical Control One-Line Rider Diagram. The NYC Fire Department prohibits cross zoning of detectors in preaction systems except where a halon system is also protecting an area identical to that protected by the sprinklers. Revise accordingly.

50.(Q) Drawing FP5.23:

a) New York City Sprinkler Note 9: Revise to read "...as per Section 3-11.7 of RS 17-2..."

b) New York City Sprinkler Note 15: Revise to read "...as per Table 3-11.6.3(a)."

c) New York City Sprinkler Note 19: Revise to read "...as per Section 3-9.4 of RS 17-2."

d) New York City Sprinkler Note 20: Revise to read "...as per Section 3-6 of RS 17-2."

e) New York City Sprinkler Note 22: Revise to read "...as per Section 3-8.3 of RS 17-2."

f) New York City Sprinkler Note 24: Revise to read "...as per Section 3-9.1.2 of RS 17-2."

g) New York City Sprinkler Note 26: Revise to read "...as per Section 3-3.2 of RS 17-2."

h) New York City Sprinkler Note 27: Revise to read "...as per Section 3-11 of RS 17-2."

i) New York City Sprinkler Note 28: Revise to read "...as per Section 3-11.6 of RS 17-2."

j) Sprinkler Equipment Schedule. Add orifice size and temperature rating of specified heads.

Attachment B - List of Comments
TAA 987134
Mayor's Emergency Management Office

FIRE PROTECTION (continued)

51.(Q) New York City Building Code Section 27-979(b) requires smoke detection in mechanical rooms over 75 sf in gross floor area in all buildings in all occupancy groups. Provide accordingly.

End of Comments
04/30/98

1

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

M E M O R A N D U M

To: Mr. Lou Menno, General Manager, World Trade Tenant Services
From: C. John Lin, P.E.
Date: April 28, 1998
Subject: WTC - ALTERATION APPLICATION W-987134 - 7 WTC - MAYOR'S EMERGENCY MANAGEMENT OFFICE

Reference: Review Request dated 4/14/98

Copy To: A. Fadavi, G. Gaeta, J. Gertler, T. O'Connor, J. Napolitano, Job Folder, Chrono Folder

A review of the material submitted with the referenced request has been made.

It is recommended that approval to proceed with construction be withheld pending submission of the items listed below being revised in accordance with the fifty-one (51) requirements listed on the attached rider.

Drawings: Specifications:

REMARKS: 1) PA Risk Management has reviewed with the NYC Fire Department the proposed 6,000 gallon fuel tank installation within the building. The installation is acceptable in concept. However, approval to proceed with construction could not be given due to the absence of structural calculations and fire protection requirements noted in the comments with an asterisk (*) in the attached rider. We suggest a meeting be scheduled with the consultant to resolve these comments.

2) This memorandum was transmitted to the Facility via OA on April 28, 1998.

Ron Pisapia
for C. John Lin, P.E.
Acting Manager
Quality Assurance Division

I.D.: W98-7134-001
HV/al
att.

Reviewers:
H. Vadi, Coordination and Architectural; A. Rohssler, Electrical; O.M. Clemente, Mechanical; H. MacDonald, Plumbing; V. Tsin, Structural; D. Luey, Fire Protection.

RIDER

ALTERATION APPLICATION W-987134

GENERAL

1. Drawing T-1. Provide a note regarding Controlled Inspection. All items subject to controlled inspection shall be listed on the plans in compliance with NYC Building Code Sections 27-132, 27-136 and PA Tenant Construction Review Manual (TCRM) 1997, Section 14.III.b.

ARCHITECTURAL

2. Drawing A-EG-23:

   a) Provide a note that all work shall conform to the latest edition of NYC Building Code and requirements of the PANYNJ. See PA Tenant Construction Review Manual, 1997.

   b) Please add a note regarding construction classification of the building, as per NYC Building Code Section 27-269.

   Please add the following notes after verification:

   c) The proposed design complies with the requirement of the Federal "American with Disabilities Act (ADA), PL-101-336."

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W-987134 (cont'd)

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W-987134 (cont'd)

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25. Drawing M1.23. Provide index for ventilation for each room or space as required by the Code Section 27-182(a)(3).

26. Drawing M1.23. Show all the fire dampers, smoke dampers or combination fire/smoke dampers, existing or new, in the ducts that penetrate the new fire rated construction as required by the Code, RS 13-1, Section 3-3.7.2 and the NYC Department of Buildings, Technical Policy and Procedure Notice #6/96. See Drawing A-23-1 for location of all fire rated walls.

27. Specification Manual, Section 15120, paragraph 1.1A5. Clarify whether the acoustical treatment of the exhaust plenum for the emergency generators poses hazardous conditions due to the perforations of the inner shell and the ability of the material used for lining to withstand high temperature generated by the internal combination engine exhaust. Submit copy of the BS&A or MEA resolution of approval for the material specified in Section 15140, Paragraph 1.1A for the acoustical lining.

28. Specification Manual, Section 15190, Paragraphs 1.3F and 1.3H. PVC material shall not be used above ground and inside the building. In addition, drift eliminators shall be noncombustible since conditions of Code Sections 27-337(i)(3) and (4) are not met.

29. Specification Manual, Section 15190, Paragraph 1.4E2. Clarify whether the the 3-inch calcium silicate insulation is adequate to limit the surface temperature of the engine exhaust pipe and muffler to not more than 200°F as required by Code Section 27-869(a)(4).

STRUCTURAL

30. The locations and loads of each piece of machinery and equipment having a weight in excess of one thousand pounds shall be noted on the drawings. Code Section 27-157(b)(3).

31. Where the existing beams are used to support the new loads, indicate on the drawings their sizes, stud arrangement, and ASTM designation.

*32. Drawing A-1-1, First Floor Construction Plan:

a) Trench Note on the Plan and Detail 2. Verify with calculations that the existing construction will not be overstressed due to the new trench cut in the existing slab.

b) Submit details of concrete wall and enclosure for 50 gallons drum.

c) Details 6 and 7, New Mezzanine. Submit structural design and details verified with calculations of the new Mezzanine construction. Also, investigate the adequacy of the ground floor slab to support the platform columns.

d) Detail 6. Indicate the height of the new masonry wall, and show how it is braced.

33. Drawing A-7-1:

a) Demolition Notes. Please add the following note: All demolition work to be in compliance with Article 6, Subchapter 19 of the NYC Code "Demolition Operations".

b) Details 4 and 6. Indicate how new curbs are anchored to the slab below.

*34. Drawing A-23-1. Submit calculations to show that the existing construction is not overstressed under the added loads in the new Storage Room 23-24, Libraries 23-28 and 23-18, File Room 23-20, LAN Room 23-23, and Vault Room 23-16.

35. Drawings A-23-2 and A-1-1, Details 4 and 5. Submit design and details of all types of suspended ceilings where the sizes, spacing, and connection details for all members of the ceiling framing are indicated, including connections between hangers and construction above. See Code RS 5-16 and Tenant Construction Review Manual (TCRM) Attachment S2.

36. Drawing D-0, Detail 10. Please indicate on the plans where partition Type 10 is used.

37. Drawing D-3, A/V Enclosures:

    a) Indicate loads on the existing floor from the new construction.

    b) Submit details of the screen bracing.

    c) Indicate hov the new steel posts are anchored to the existing slab.

38. Drawing S-3:

    a) Indicate sizes of the new framing between column lines 33 and 35.

    b) Note 3. Submit details of the new 1/2" reinforcing plate.

39. Drawing S-4, Part Plan at Roof:

    a) Indicate sizes of the roof framing.

    b) Clarify how the two posts, located between corner posts, are braced in North-South direction.

40. Drawing S-5:

    a) Section 2:

        i) Indicate hov the new W6 are connected to the existing framing.

        ii) Submit braces connection details or indicate forces in them for connection design purposes.

        iii) Section 3. Submit column's base plate and anchor bolts detail, verified with calculations.

    b) Typical detail for Antenna support. Indicate location of this support on the plan.

*41. Structural Calculations:

a) It is noted that calculations were submitted only for the new work on the 7th floor and the 23rd floor between column lines 08 and 11. Please submit calculations for the rest of the structural work shown on Drawings S-1, and S-3 through S-5.

b) Submit calculations to verify that the existing columns are not overstressed due to the added loads.

c) The existing floor beams were checked for vertical loads only. Please clarify if they are part of the lateral load resisting system and include the effects of lateral loading in the design, if necessary.

d) For composite beams verify that the existing stud arrangement are adequate for the new loading conditions.

e) For the existing beams used to support the new loads, investigate if the existing connections are adequate for the revised loading conditions.

f) 7th Floor Calculations. Include in the design weight of Fuel Oil Day Tank, shown on Section 6/A-7.1.

g) 23rd Floor Calculations. Include in the design weights of AC units shown in the Schedule on Drawing M4.01.

FIRE PROTECTION

42. Specification Section 15305:

a) Subsection 1.1C.7: Revise to read "Prepare and submit to the Port Authority, as set... acceptable to the Port Authority."

b) Subsection 1.6A.3: Revise to read "...as required by the NYC Building Code, and by PA Tenant Construction Review Manual, Attachment S3."

43. Specification Section 15310, Subsection 2.1.A: Revise to read "...in accordance with NYC Building Code Reference Standards RS 17-1 and 17-2."

44. Specification Section 15330:

a) Subsection 1.1D: Revise third sentence to read "...and Ordinary Hazard areas in NYC Building Code Reference Standard RS 17-2." Delete "Fire Department" in the fourth sentence.

b) Subsection 2.4.D: Revise first sentence to read "...in accordance with NYC Building Code Reference Standard RS 17-2 (1989 Edition NFPA 13) Section 3-11.7."

45. Sprinkler Specification 15340, Subsection 1.4A. Drawing FP4.23, Pre-action sprinkler systems single Interlock type with Electrical Release 1.B. requires 10 years of experience. Coordinate and revise accordingly.

*46. Drawing FP1.01. The drawing shows sprinkler protection underneath the new tank floor. Please provide sprinklers for the space above the new tank floor also, to protect the new oil tank.

47. Drawing FP2.07. Provide full sprinkler protection in the proposed OEM space, including the new Generator and Tank Room.

48. Drawing FP3.23:

a) Sprinkler layout exceeds 120 sf per head for ordinary hazard in Sprinkler Specification 15305, Subsection 1.8C.1, and 150 sf per head for light hazard in Sprinkler Specification 15305, Subsection 1.8C.2. Coordinate and revise accordingly.

b) Submit signed and sealed hydraulic sprinkler calculation.

49. Drawing FP4.23, Pre-action Sprinkler System Description and Sequence of Operations (Items 2.B and 3), Pre-action System Assembly Detail, and Pre-action Fire Sprinkler System Electrical Control One-Line Rider Diagram. The NYC Fire Department prohibits cross zoning of detectors in preaction systems except where a halon system is also protecting an area identical to that protected by the sprinklers. Revise accordingly.

50. Drawing FP5.23:

a) New York City Sprinkler Note 9: Revise to read "...as per Section 3-11.7 of RS 17-2..."

b) New York City Sprinkler Note 15: Revise to read "...as per Table 3-11.6.3(a)."

c) New York City Sprinkler Note 19: Revise to read "...as per Section 3-9.4 of RS 17-2."

d) New York City Sprinkler Note 20: Revise to read "...as per Section 3-6 of RS 17-2."

e) New York City Sprinkler Note 22: Revise to read "...as per Section 3-8.3 of RS 17-2."

f) New York City Sprinkler Note 24: Revise to read "...as per Section 3-9.1.2 of RS 17-2."

g) New York City Sprinkler Note 26: Revise to read "...as per Section 3-3.2 of RS 17-2."

h) New York City Sprinkler Note 27: Revise to read "...as per Section 3-11 of RS 17-2."

i) New York City Sprinkler Note 28: Revise to read "...as per Section 3-11.6 of RS 17-2."

j) Sprinkler Equipment Schedule. Add orifice size and temperature rating of specified heads.

51. New York City Building Code Section 27-979(b) requires smoke detection in mechanical rooms over 75 sf in gross floor area in all buildings in all occupancy groups. Provide accordingly.

THE P[illegible] AUTHORITY OF NEW YORK AND NE[illegible]ERSEY

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TENANT ALTERATION APPLICATION REVIEW REQUEST

DISTRIBUTION		
No	To	Facility
5	QAD	51 N
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	S.P. Chiao	88-S
	G. Daly	88-S
2	S. Batra	2WTC 37FL
1	C. Bonacci	2WTC 35FL

Facility 7WTC FLR _____ TAA No. 987134 Date 4/14/98

Application / Tenant MAYOR'S OFFICE

Consultant SWANKE HAYDEN CONNELL

Estimated Cost 10,000,000 Submittal No. 2

Description of Work

BUILD OUT OF TENANT SPACE

Please review the attached (revised) application and send comments to:

Name J. GERTLER

Location: 1 WTC - 88 - South Phone: 435-4531

4 28 98

[redacted]

DUE DATE

DESIGN DISCIPLINES

- ☐ Architectural
- ☐ Egress Analysis
- ☐ Structural
- ☐ HVAC
- ☐ Plumbing
- ☐ Sprinkler
- ☐ Electrical
- ☐ Utility > 600 V
- ☐ Civil
- ☐ Geotechnical
- ☐ Environmental
- ☐ Fueling
- ☐ Radio Freq. Coord.
- ☐ Corrosion Protection
- ☐ Elevator / Escalator
- ☐ Other_____

ATTACHMENTS

- ☐ Document List
- ☐ Contract Drawings
- ☐ Contract Specifications
- ☐ Tenant Response
- ☐ Computations
- ☐ Reports
- ☐ Catalog Cuts
- ☐ Other

DESCRIPTION

THE PORT AUTHORITY OF N.Y. & N.J.
ENGINEERING DEPT. QUALITY ASSURANCE DIV.
DESIGN STANDARDS
W98-7134 (1)
APR 14 1998
RECEIVED
ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

Special Instructions

Copy To: G. Gaeta, J. Napolitano, E. Monteverde, N. Seliga

[redacted], J. PICONE ~~(Proj. Mgr.)~~

Jeffrey Gertler

Signature

form:gertler/TAA/review revised 3/3/98

4/8

BUCKSLIP

TO: RON PISAPIA
FROM: JEFF GERTLER
DATE: APRIL 7, 1998
SUBJECT: REVIEW BY APPOINTMENT
MAYOR'S OFFICE OF EMERGENCY RESPONSE
TAA 987.134 W98-7134

OK!
RTP

Copy: G. Gaeta, K. Piatt, J. Picone

I am requesting a review by appointment on Wednesday April 15th, early morning. The drawings will be in your hands before 3:00pm Tuesday April 14th.

Attached in the following information:
- Scope of work
- Cost estimate
- List of Drawings

Please call me to confirm this date and time.

Thank You

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REFERRED TO:

DUE!

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DESIGN STAFF
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ALTERATIONS APPLICATION
TENANT CONSTRUCTION REVIEW UNIT

SWANKE HAYDEN CONNELL ARCHITECTS

Fax Message

To: Mr. Jeffrey Gertler Port Authority of New York	From: Joseph J. Aliotta
	Fax: (212) 435-8168
	Job: 5576A
	Date: March 24, 1998 12:52 PM Pages: 1

Message:

Re: Mayor's Office of Emergency Management
7 World Trade Center

Per your voice mail request, the following is a description of the project:

OEM will occupy approximately 35,000 square feet of office space at the 23rd Floor of 7 World Trade Center. Its purpose is to provide the Mayor, OEM and other City agencies involved with the activation of the Emergency Operations Center. The state-of-the-art EOC staff collects, assesses, plans and coordinates multi-agency response to events ranging from weather related emergencies to planned major events such as a presidential visit to counter terrorist activities. During non-emergency periods, OEM prepares guidelines for handling future emergency situations. Major program spaces such the EOC, 24 hour/7 day a week Watch Command, Crisis Management Center, Press Room and necessary support spaces will be housed on one floor The Press Room allows for press briefings including network TV feeds from network TV trucks at street level and call taking for emergency hot-line phone numbers. The 6,400 square feet EOC provides over 70 workstations and a dozen agencies to occupy the center during emergency activation. The Mayor, OEM senior management can oversee and coordinate agency response from the Crisis Management Center utilizing audio-visual system interconnectivity to the emergency response computer systems and cable TV.

The EOC is designed to operate self-sufficiently on an emergency basis for at least a week with its own emergency electrical power and water supply. In order for it to be self-sufficient, a 6,000 gallon fuel oil tank is located at the Ground Floor adjacent to the Building Lobby supplying fuel oil to three 500 KVA emergency generators at the 7th Floor as well as a 11,000 gallon water storage tank on the 7th Floor supplying water for the plumbing fixtures at the 23rd Floor. In addition, a Rooftop Radio Room is designed to house the Motorola radio equipment racks with approximately 14 antennas located near the cooling towers.

The approximate construction cost shall be $ 10,000,000.

Should you or any member of your team have questions, please don't hesitate to call me at my direct line (219-6716)

THE PORT AUTHORITY OF
ENGINEERING DEPT. ...
DESIGN ...

Cc: C. Chu-Silverstein Properties (687-0067)
W. Weems-Silverstein Properties (732-5190)
J Domingvez-DCAS/DRES (669-3640)

APR 15 1998
W98-7134 (1)
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W:\5576\A\OEMDocs\Fax\File Fax\PA Project Description 04-07-98.doc

Swanke Hayden Connell Ltd./Swanke Hayden Connell & Partners LLP
295 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059

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RE-FAXED 04-06-98
6:00 PM

SWANKE HAYDEN CONNELL ARCHITECTS

Fax Message

To: Jeffrey Gertler
Port Authority of New York

From: Joseph Allotta

Phone: 212-226-9696 **Page Quantity:** 10

435-8168 **Job:**

Date: April 06, 1998 **Time:** 16:52

Message:

One copy the List of Drawings and Specification Table of Contents for the Mayor's Office of Emergency Management at 7 World Trade Center dated 04-06-98.

Per our telephone conversation, SHCA requests a drawing review by appointment for Tuesday 04/14/98. As discussed, we will forward the drawings to your attention by 04/13/98.

Please call with any questions or comments.

THE PORT AUTHORITY
ENGINEERING DEPT. CIVIL
DESIGN SECTION
15
LW98-7134 (1)

Swanke Hayden Connell Ltd.
Swanke Hayden Connell & Partners LLP
Istanbul London Miami New York Washington
212 226 9696, Fax 212 219 0059
E-Mail *@SHCA.COM

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[redacted]

SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York

SHCA Project No. 5576A
Date: April 6, 1998

THE PORT AUTHORITY OF
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LIST OF DRAWINGS

Issued for Review
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DRAWING NUMBER	DRAWING TITLE	ISSUE DATE
Architectural		
T-1	TITLE SHEET	4/6/98
A-EG-23	23RD FLOOR EGRESS PLAN	4/6/98
A-1-1	PART 1ST FLOOR CONSTRUCTION PLAN	4/6/98
A-7-1	PART 7TH FLOOR CONSTRUCTION PLAN	4/6/98
A-23-1	23RD FLOOR PARTITION PLAN	4/6/98
A-23-2	23RD FLOOR REFLECTED CEILING PLAN	4/6/98
A-23-3	23RD FLOOR POWER, TELEPHONE AND EQUIPMENT PLAN	4/6/98
A-23-4	POWER AND TELEPHONE LOCATION PLAN	4/6/98
A-23-5	FINISH PLAN	4/6/98
A-23-6	FURNITURE PLAN	4/6/98
A-48-1	PART ROOF / RADIO ROOM CONSTRUCTION PLAN	4/6/98
D-0	PARTITION TYPES, DOOR TYPES & DETAILS	4/6/98
D-1	NEW BATHROOMS & PANTRIES PART PLANS, ELEVATIONS AND DETAILS	4/6/98
D-2	ELEVATIONS & MILLWORK SECTIONS & DETAILS	4/6/98
D-3	A/V ENCLOSURES ELEVATIONS AND DETAILS	4/6/98
D-4	ELEVATIONS AND DETAILS	4/6/98
D-5	ELEVATIONS & DETAILS	4/6/98
D-6	DETAILS	4/6/98
D-7	DETAILS	4/6/98
D-8	DETAILS	4/6/98
D-9	DETAILS	4/6/98
D-10	PART PLAN AND DETAILS	4/6/98
D-11	EOC WORK STATION DETAILS	4/6/98
D-12	TYPICAL - EXTERIOR DETAIL	4/6/98
BFI Furniture Drawings		
	WORK STATION PLAN 23RD FLOOR	4/6/98
	ENERGY / PANEL PLAN 23RD FLOOR	4/6/98

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SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
7 World Trade Center
New York, New York

SHCA Project No. 5576A
Date: April 6, 1998

LIST OF DRAWINGS
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DRAWING NUMBER	DRAWING TITLE	ISSUE DATE
Mechanical		
M1-01	1ST FLOOR HVAC PLAN	4/6/98
M1-07	7TH FLOOR HVAC PLAN	4/6/98
M1-23	23RD FLOOR HVAC PLAN	4/6/98
M4-01	ROOF PART PLAN, NOTES AND DETAILS	4/6/98
Electrical		
E-001	SYMBOL LIST	4/6/98
E-1.01	1ST FLOOR PLAN	4/6/98
E-1.07	7TH FLOOR PLAN, LIGHTING, POWER & SIGNAL	4/6/98
E-1.23	23RD FLOOR PLAN - POWER & SIGNAL PLAN	4/6/98
E-2.23	23RD FLOOR PLAN - LIGHTING	4/6/98
E-1.46	ROOF PLAN	4/6/98
E-3.01	POWER RISER DIAGRAM	4/6/98
E-4.01	SCHEDULE & DETAIL SHEET #1	4/6/98
E-4.02	SCHEDULE & DETAIL SHEET #2	4/6/98
E-4.03	SCHEDULE & DETAIL SHEET #3	4/6/98
E-6.01	MOTOR LIST	4/6/98
E-6.02	MOTOR NOTES	4/6/98
Plumbing		
P1.01	PLUMBING 1ST FLOOR PLAN	4/6/98
P2.07	PLUMBING 7TH FLOOR PLAN	4/6/98
P3.23	PLUMBING 23RD FLOOR PLAN	4/6/98
P4.23	PLUMBING NOTES, SCHEDULES, KEY OF SYMBOLS & LIST OF DRAWINGS	4/6/98
P5.23	PLUMBING RISER DIAGRAMS	4/6/98
Fire Protection		
FP1.01	FIRE PROTECTION 1ST FLOOR PLAN	4/6/98
FP2.07	FIRE PROTECTION 7TH FLOOR PLAN	4/6/98
FP3.23	FIRE PROTECTION 23RD FLOOR PLAN	4/6/98
FP4.23	FIRE PROTECTION PRE-ACTION NOTES, SCHEDULES & DETAILS	4/6/98
FP5.23	FIRE PROTECTION SPECIFICATIONS, NOTES, KEY OF SYMBOLS, SCHEDULE & LIST OF DRAWINGS	4/6/98
FP6.23	FIRE PROTECTION RISER DIAGRAM	4/6/98

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MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York

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LIST OF DRAWINGS

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DRAWING NUMBER	DRAWING TITLE	ISSUE DATE
Structural		
S-1	1ST FLOOR FARMING PLAN	4/6/98
S-2	7TH FLOOR FARMING PLAN	4/6/98
S-3	23RD FLOOR FARMING PLAN	4/6/98
S-4	ROOF PART FARMING PLAN	4/6/98
S-5	SECTIONS	4/6/98
Audio / Visual		
AV-1	23rd FLOOR EMERGENCY OPERATIONS CENTER A/V FACILITIES PLANS	4/6/98
AV-2	23rd FLOOR MAYOR'S / COMMISSIONER'S SUITES A/V FACILITIES PLANS	4/6/98
AV-3	23rd FLOOR A/V FACILITIES PLANS WATCH COMMAND / PRESS ROOM	4/6/98
AV-4	23rd FLOOR A/V FACILITIES PLANS PIU / TRAINING ROOM	4/6/98
AV-E0	23rd FLOOR A/V ELECTRICAL SYMBOLS A/V ELECTRICAL	4/6/98
AV-E1	23rd FLOOR EMERGECNY OPERATIONS CENTER A/V ELECTRICAL PLANS	4/6/98
AV-E2	23rd FLOOR MAYOR'S / COMMISSIONER'S SUITES A/V ELECTRICAL PLANS	4/6/98
AV-E3	23rd FLOOR WATCH COMMAND / PRESS ROOM A/V ELECTRICAL PLANS	4/6/98
AV-E4	23rd FLOOR PIU / TRAINING ROOM ELECTRICAL PLANS	4/6/98
AV-E5	23rd FLOOR A/V HEAD END SIGNAL DISTRIBUTION COAXIAL CABLE BACKBONE	4/6/98
AV-S1	23rd FLOOR OPERATIONS CENTER RGB / VIDEO FUNCTIONAL DIAGRAM	4/6/98
AV-S2	23rd FLOOR MAYOR'S CONFERENCE ROOM RGB / VIDEO FUNCTIONAL DIAGRAM	4/6/98
AV-S3	23rd FLOOR MASTER AUDIO SYSTEM FUNCTIONAL DIAGRAM	4/6/98
AV-S4	23rd FLOOR PIU / TRAINING ROOM RGB / VIDEO / AUDIO FUNCTIONAL DIAGRAM	4/6/98
AV-S5	23rd FLOOR MAYOR'S / COMMISSIONER'S SUITES AUDIO FUNCTIONAL DIAGRAM	4/6/98
AV-S6	PRESS FEED SYSTEM DISTRIBUTION AUDIO / VIDEO FUNCTIONAL DIAGRAM	4/6/98
AV-S7	RF DISTRIBUTION / HEAD END SYSTEM	4/6/98
AV-S8	23rd FLOOR MASTER CONTROL SYSTEM, CONTROL SYSTEM FUNCTIONALITY	4/6/98
Telecommunications		
TC-100	GENERAL NOTES AND SYMBOLS	4/6/98
TC-101	TELECOMMUNICATIONS PATHWAYS SCHEMATIS	4/6/98
TC-103	TELECOMMUNICATIONS CABLE DISTRIBUTION PATHWAY	4/6/98
TC-103A	TECHNOLOGY ROOM DETAILS	4/6/98
TC-103B	TELECOMMUNICATIONS OUTLET LOCATIONS	4/6/98

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MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York

SHCA Project No. 5576A
Date: April 6, 1998

LIST OF DRAWINGS

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DRAWING NUMBER	DRAWING TITLE	ISSUE DATE
Security		
03SZ001	RISER DIAGRAM	4/6/98
03SL002	SECURITY EQUIPMENT LOCATION	4/6/98
03SL003	SECURITY EQUIPMENT DETAILS	4/6/98
03SL005	SECURITY EQUIPMENT CONSOLE	4/6/98

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MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York 10048

SHCA Project No. 5576A
April 6, 1998

THE PORT AUTHORITY OF ...
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TENANT CONSTRUCTION ...

Specification Table of Contents
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SECTION NO.	SPECIFICATION SECTION	ISSUE DATE
ARCHITECTURAL		
DIVISION 1	GENERAL REQUIREMENTS	
01010	Summary of Work	4/6/98
01020	Allowances	4/6/98
01030	Alternates	4/6/98
10140	Coordination	4/6/98
01045	Cutting and Patching	4/6/98
01200	Project Meetings	4/6/98
01300	Submittals	4/6/98
01400	Quality Control	4/6/98
10421	Reference Standards and Definitions	4/6/98
01500	Construction Facilities and Temporary Controls	4/6/98
01600	Materials and Equipment	4/6/98
10631	Substitutions	4/6/98
01700	Contract Closeout	4/6/98
DIVISION 2	SITE CONSTRUCTION	
02070	Selective Demolition	4/6/98
DIVISION 3	CONCRETE	
03300	Cast-In-Place Concrete	4/6/98
DIVISION 4	MASONRY	
04200	Unit Masonry	4/6/98
DIVISION 5	METALS	
05120	Structural Steel	4/6/98
05500	Metal Fabrications	4/6/98
05550	Sheet Metal Fabrications	4/6/98
DIVISION 6	WOOD AND PLASTICS	
06100	Rough Carpentry	4/6/98
06400	Architectural Woodwork	4/6/98
DIVISION 7	THERMAL AND MOISTURE PROTECTION	
07110	Sheet Waterproffing	4/6/98
07255	Fireproof Patching	4/6/98

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7 World Trade Center
New York, New York 10048

SHCA Project No. 5576A
April 6, 1998

Specification Table of Contents

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SECTION NO.	SPECIFICATION SECTION	ISSUE DATE
07270	Firestopping	4/6/98
07410	Metal Wall Panels	4/6/98
07510	Membrane Roofing and Repairs	4/6/98
07600	Flashing and Sheet Metal	4/6/98
07900	Joint Sealants	4/6/98
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08000	Door Schedule	4/6/98
08110	Steel Doors and Frames	4/6/98
08210	Wood Doors	4/6/98
08305	Access Doors	4/6/98
08450	Interior Metal and Glass Partitions	4/6/98
08710	Door Hardware	4/6/98
08800	Glass and Glazing	4/6/98
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09255	Gypsum Board Assemblies	4/6/98
09310	Tile	4/6/98
09511	Acoustical Panel Ceilings	4/6/98
09515	Metal Ceilings	4/6/98
09520	Fabric Wrapped Panels	4/6/98
09525	Fiberglass Composite Ceilings	4/6/98
09600	Interior Stonework	4/6/98
09651	Resilient Flooring	4/6/98
09680	Carpet	4/6/98
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09700	Resinous Flooring	4/6/98
09900	Painting	4/6/98
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DIVISION 10	SPECIALTIES	
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10155	Toilet Compartments	4/6/98
10270	Access Flooring	4/6/98
10522	Fire Extinguishers and Cabinets	4/6/98
10650	Operable Partition System	4/6/98
10800	Toilet and Bath Accessories	4/6/98

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APR-06 98 18:06 FROM:SHCA LTD TO:94358168 PAGE:07/10

SWANKE HAYDEN CONNELL ARCHITECTS

MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York 10048

SHCA Project No. 5576A
April 6, 1998

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Issued for Review
100% C.D. Documents

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15340	PREACTION & MISCELLANEOUS SPRINKLER SYSTEMS	4/6/98
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15410	PLUMBING PIPING	4/6/98
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15445	PLUMBING PUMPS	4/6/98
15450	INSULATION FOR PLUMBING	4/6/98
15486	FOUNDATIONS, VIBRATION ISOLATION, & SUPPORTS FOR RIGIDLY SUPPORTED EQUIPMENT (SEISMIC DESIGN)	4/6/98
15991	TESTING OF SYSTEMS	4/6/98
15996	MISCELLANEOUS PLUMBING SYSTEMS	4/6/98

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7 World Trade Center
New York, New York 10048

SHCA Project No. 5576A
April 6, 1998

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Issued for Review
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17600A	Copper Telecommunications Cable Plant Specification	4/6/98
17600B	Copper and Fiber Optic Telecommunications backbone Cable Plant Specification	4/6/98
17600C	Data, Cable TV and Miscellaneous Systems Infrastructure Specifications	4/6/98
STRUCT'L CALCULATIONS		
	Structural Calculations	

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MAYOR'S OFFICE OF EMERGENCY MANAGEMENT

7 World Trade Center
New York, New York 10048

SHCA Project No. 5576A
April 6, 1998

Furniture Manifests
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ITEM	DESCRIPTION	ISSUE DATE
FURNITURE		
	FURNITURE SYSTEMS MANIFEST	4/3/98
	LOOSE FURNTURE MANIFEST	3/30/98

THE PORT AUTHORITY
ENGINEERING DEPT.
DESIGN
APR 15
W98-7134 (1)
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TERMINALS

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APR-06 98 18:07 FROM:SHCA LTD TO:9435816B PAGE:10/10

THE PORT AUTHORITY OF NY & NJ **MEMORANDUM**

TO: File
FROM: Gerard M. Cummiskey
DATE: April 27, 1998
SUBJECT: **FDNY REVIEW – WTC7 DIESEL TANK**

COPY: S. Bhol, N. Chanfrau, J. Gertler, E. Petrick, D. Warren

On April 23, 1998 and April 27, 1998, I spoke with the Fire Department - City of New York, Director of Engineering, James Hansen, regarding the proposed installation of a 6,000 gallon diesel fuel tank at WTC7. This tank will supply fuel for the emergency power generators supporting the City's Office of Emergency Management Complex.

Mr. Hansen's only comment was to recommend the installation of an appropriate fire suppression system in the area of the fuel tank.

G. Cummiskey

Gerard M. Cummiskey
Manager, Risk Control Division
Risk Management

cc. D. Lucey
Job Folder

TOTAL P.02

Mayor's Office of Emergency Management
7 World Trade Center
TAA W98-7134

Fuel Oil Tank for Emergency Generator

Background:

Mayor's Office of Emergency management will be leasing the 23rd floor of the building. As per the consultants of the Alteration project, a 6,000 gallons fuel oil tank will be required for the emergency generators, to be located on the 7th floor, to support the operation during emergency.

The existing fuel oil tanks for the building's emergency generators are located below ground under the loading docks on Vesey street. Due to the physical limitations in installing this proposed 6,000 gallon tanks below ground in this area, the consultants for the project have proposed to locate this tank inside the building in a room adjacent to the ground floor lobby on Vesey street which currently houses a battery operated Genie Boom(Televator) used for the maintenance of the lobby lighting.

Inside the room, the tank will be supported on an elevated concrete platform on steel framing occupying the entire room. This elevated platform will be accessible from the space below through an access hatch. The concrete platform and the enclosure above will be 4-hour fire resistance rated. The space will be vented to the outdoors by mechanical means.

Silverstein Properties, the manager of the building, intend to continue to house the Televator in this room under the raised platform. They maintain that there is no other room in the building for them to store the Televator. Accordingly, the submitted drawings indicate the space below the platform as storage room, occupancy class B2(low hazard). The space below the platform will be provided with sprinkler protection and mechanical ventilation.

Codes:

New York city Building Code section 27-829(a)(3) as well as the New York City Fire Department Rule 21-17(e)(1)(iii) have identical provision for fuel oil tanks located inside of buildings:

> Storage tanks having a capacity of 1,100 gallons or more may be installed above ground on the lowest floor of a building, provided that all portions of such tanks above the floor are completely enclosed with non combustible construction having at least a 3-hour resistance rating.

If the flash point of the fuel oil is under 200 degrees Fahrenheit, the space would be classified as Occupancy group A, high hazard , as per building code section 27-243(a) and would require 4-hour fire resistance rating, instead of 3, as per Code section27-403. Furthermore, sprinklers and ventilation system would be required, as per code sections 27- 404 and 405.

Discussions:

The codes permit fuel tanks of 275 gallons or less capacity inside buildings above the lowest floor. However, due to the fire hazards associated with larger tanks, these are permitted only on the lowest floor of a building, with varying degree of fire protection depending on the size of tanks, for direct and quick access of the fire fighters.

The raised concrete platform, although occupying the entire room, is in essence a structure to support the tank and the installation can be considered to be on the lowest floor of the building provided the fire rating of the enclosure is extended down to the main floor. The storage space under the platform, however, raises the following safety issues and concerns.

- Although the equipment to be stored is not combustible, it is battery operated and has rubber tires on the wheels. There is a possibility of accumulation of explosive gases in the space during battery charging operation.
- Creating a storage space under the tank support is not in accordance with the letter of the code.

Due to the limited number of batteries the quantity of gas that may be discharged would be very small. With a properly designed ventilation system, the possibility of gas accumulation can be eliminated.

Although the storage space may not be strictly in accordance with the letter of the code, by providing a properly fire rated access hatch between the storage space and the platform above, the tank will be completely separated by fire rated construction from the space below.

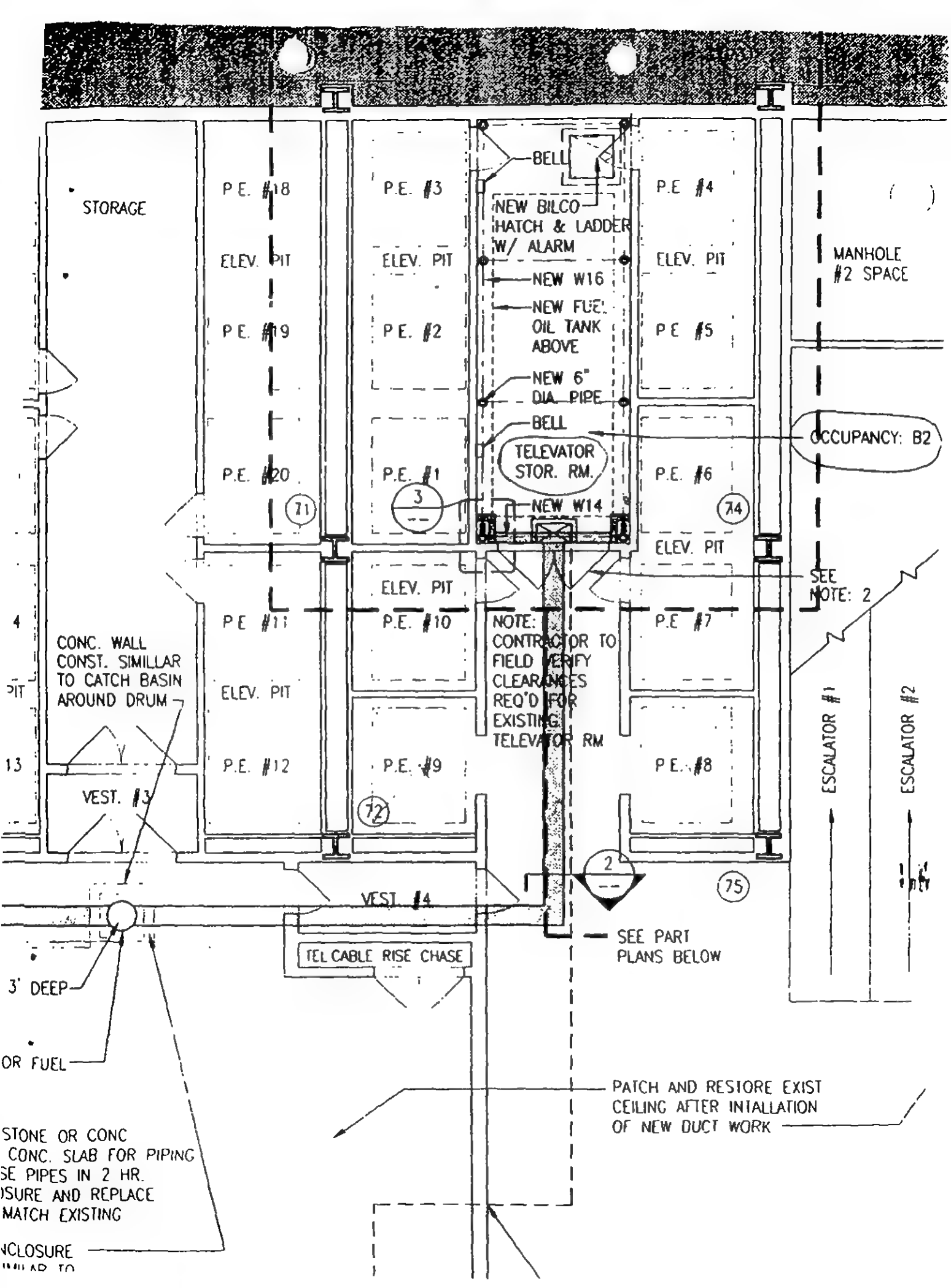
Conclusion:

Fuel tank installations are primarily governed by Fire Department Rules. It is recommended that Risk Management obtain fire Department concurrence on this installation. With the Fire Department's concurrence, the installation can be accepted provided the following safety features are incorporated in the design:

- Adequate Ventilation system to prevent accumulation of explosive gases from battery charging
- Explosion-proof wiring and electrical fixtures in the space

- Properly rated access hatch between the concrete platform and the space below.

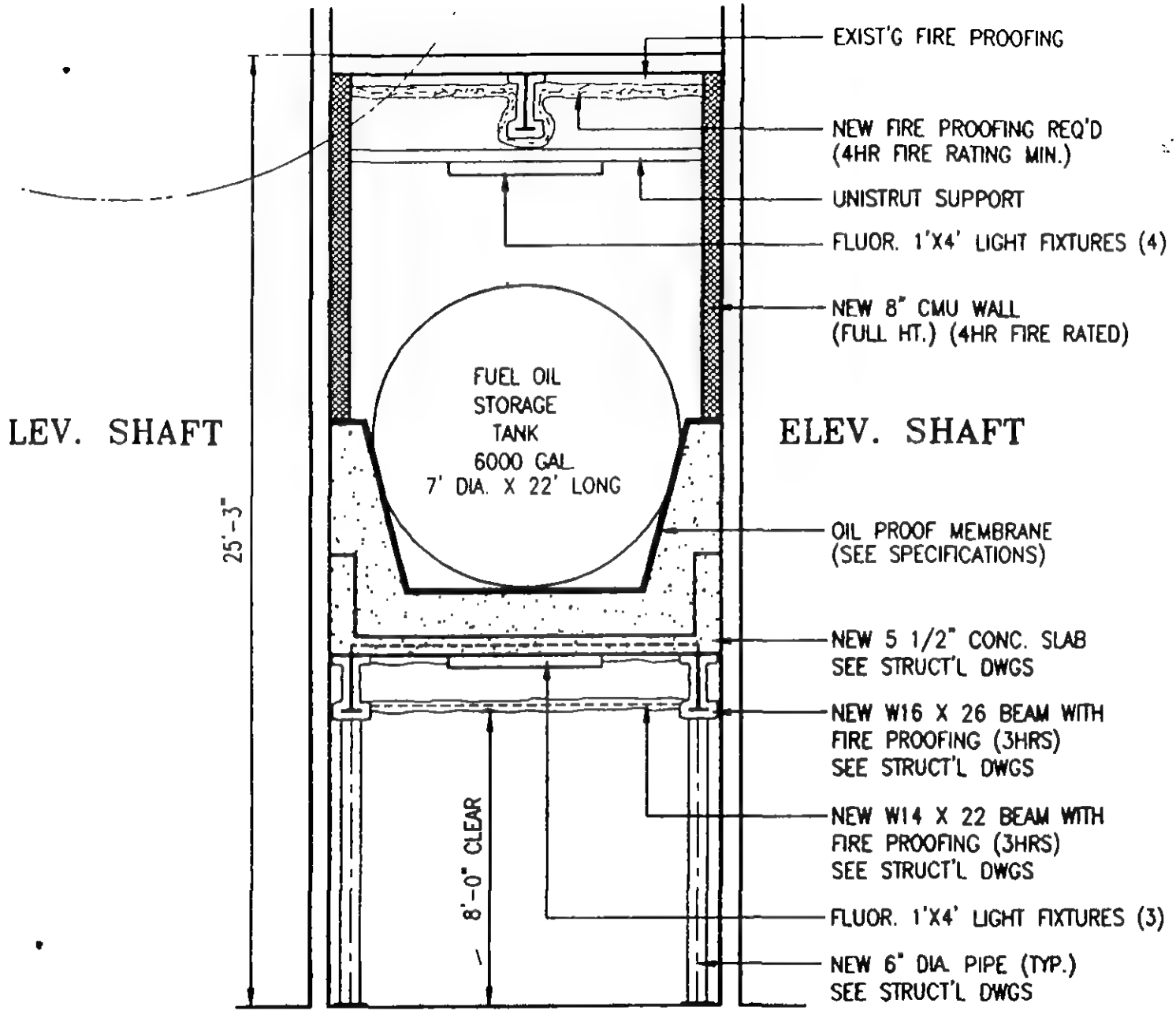
Saroj Bhol
Quality Assurance
4/22/98


STORAGE
P.E. #18
ELEV. PIT
P.E. #19
P.E. #20
71
P.E. #3
ELEV. PIT
P.E. #2
P.E. #1
3
P.E. #11
P.E. #10
ELEV. PIT
P.E. #12
P.E. #9
72
BELL
NEW BILCO HATCH & LADDER W/ ALARM
NEW W16
NEW FUEL OIL TANK ABOVE
NEW 6" DIA. PIPE
BELL
TELEVATOR STOR. RM.
NEW W14
P.E. #4
ELEV. PIT
P.E. #5
P.E. #6
74
ELEV. PIT
P.E. #7
P.E. #8
MANHOLE #2 SPACE
OCCUPANCY: B2
SEE NOTE: 2
NOTE: CONTRACTOR TO FIELD VERIFY CLEARANCES REQ'D FOR EXISTING TELEVATOR RM
ESCALATOR #1
ESCALATOR #2
2
75
SEE PART PLANS BELOW
CONC. WALL CONST. SIMILLAR TO CATCH BASIN AROUND DRUM
VEST. #3
VEST. #4
TEL CABLE RISE CHASE
3' DEEP
OR FUEL
STONE OR CONC
CONC. SLAB FOR PIPING
SE PIPES IN 2 HR.
SURE AND REPLACE
MATCH EXISTING
NCLOSURE
PATCH AND RESTORE EXIST CEILING AFTER INTALLATION OF NEW DUCT WORK

(28)

(28)

GENERAL NOTE:
CONSTRUCTION OF FUEL TANK AREA SHALL COMPLY W/ PORT AUTHORITY STANDARDS AND COMPLY TO NYC BUILDING CODE TO THE FULLEST EXTENT POSSIBLE.



7

SECTION THROUGH FUEL OIL TANK ROOM

1/4" = 1'-0"

Rec'd 3/24/98

SWANKE HAYDEN CONNELL ARCHITECTS

205 Lafayette Street, New York, New York 10012
212 226 9696, Fax 212 219 0059

March 20, 1998

THE PORT AUTHORITY OF NY & NJ
QUALITY ASSURANCE DIV.
ENGINEERING DEPT.
MAR 24 1998
RECEIVED
COPIED:
ROUTED TO: Dave Warren
D. Lucy.

Mr. Jeffrey Gertler
Project Manager
Port Authority of New York
1 World Trade Center
New York, New York 10048

Re: Mayor's Office of Emergency Management
7 World Trade Center-23rd Floor
New York, New York
SHCA Project No. 5576A
TAA No. 987134
"Conceptual Review-Submission : Fuel Oil Room"

Dear Mr. Gertler:

We would like to take the opportunity to thank you and the other Port Authority staff members present for taking the time to meet with us on Thursday March 19, 1998. The review of your comments in connection to the above referenced submission was helpful. Per our meeting, the following is the additional information requested to clarify the design intent and code issues related to the fuel oil tank design:

The Section 27-829(a)(3) of the NYC Building Code states "TANK CAPACITY ELEVEL HUNDRED GALLONS OR MORE.-Storage tanks having a capacity of eleven hundred gallons or more may be installed above ground on the lowest floor of the building, provided that all portions of such tanks above the floor are completely enclosed with noncombustible construction having at least a three hour resistance rating. ....."

Per the conceptual drawing A-1- submission, the lowest floor of 7 World Trade Center is the Ground Floor. This building does not have a cellar or basement. The next floor above Ground is the identified as the 3rd Floor. There are no elevator stops or fire stair access doors between the Ground & 3rd Floors making the Ground Floor and this room a double height space (floor-to-floor height of 25'-3"). The 6,000 gallon fuel oil tank shall be located in a room adjacent to the Ground Floor Lobby on Vesey Street which currently houses a televator utilized to maintain the Lobby lighting. The fuel oil tank shall be enclosed with noncombustible construction having at least a three hour resistance rating as required by Code. As submitted, we propose to support the tank above the floor within this room and to build a platform with walls and curbs to retain fuel oil in the event of leakage. We shall conform to all applicable provisions of the NYC Building Code: Subchapter 14, Article 17- Fuel Oil Equipment.

As discussed, we shall confirm the type of fuel oil to be stored and its minimum flashpoint temperature to determine whether the room needs to be classified as Occupancy Group A-High Hazard. We shall conform to the applicable provisions of the Code based upon the occupancy classification determined for the type of fuel oil to be stored. As discussed, Silverstein Properties, Inc. will continue to house the televator in this location. Currently, the televator is a Genie Boom Model No. Z-45-22 which is battery operated and occupies most of this room. We propose that this Genie storage area be classified as Occupancy Group B-2-Storage (low hazard) and we shall provide a fire separation or fire division between uses in the room in accordance to the Code requirements.

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MAR-24 98 12:54 FROM:SHCA LTD TO:9435816B PAGE:02/03

Mr. Jeffrey Gertler
Port Authority of New York
Mayor's Office of Emergency Management
7 World Trade Center
SHCA Project No. 5576A
TAA No. 987134
March 20, 1998

Again, we thank you for your time and assistance. We look forward to working with you to bring about a successful project for the Mayor's Office of Emergency Management. Should you have any questions or comments, please call.

Sincerely,

SWANKE HAYDEN CONNELL ARCHITECTS

Joseph J. Aliotta

Joseph J. Aliotta 219-6716
Associate Principal

cc: C. Chu-Silverstein Properties
W. Weems-Silverstein Properties
C. Rizzo-Rizzo & Associates

Discussed w/ D Warren + D. Lueng or 3/26/98

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(vii) Connections between bracing members and the sides of the tank shall be designed so that the connections will not fail before the member will fail.

(4) *All tanks except vertical tanks above ground 275 gallons or less capacity.* All storage tanks of 275-gallon capacity or less that are not buried shall have a minimum thickness of shell and head plated of number 10 manufacturer's standard gauge steel plate. Storage tanks of 60-gallon capacity or less shall be similarly constructed but need not be thicker than No. 14 manufacturer's standard gauge.

(5) *Vertical storage tanks over 1,000-gallon capacity located outside of building above ground.*

(i) Vertical tanks located outside of buildings above ground shall be built of steel plates of the quality required for cylindrical tanks.

(ii) The minimum thickness of roof plates shall be ⅛-inch. The thickness of shell plates shall be determined in accordance with the following formula:

$$t = \frac{TE}{PRF}$$

Where: t=thickness of shell plate in inches

P=head pressure at bottom of ring under consideration in p.s.i.

R=radius of shell, in inches

F=factor of safety (taken as 5)

T=tensile strength of plate, in p.s.i. as verified by mill test certificate

E=efficiency of vertical joint in pipe under consideration

E. shall in no case be taken greater than 1.00.

Roof plates shall have single lap-riveted or welded water-tight seams, and the roof shall be built to shed water. Bottom plates shall have single lap riveted or welded seams. Shell plate seams shall be designed to develop the full strength of the plate.

(e) (1) *Location of tanks.* Inside of building, above ground on the lowest floor.

(i) *Tank Capacity of 550 gallons or less.* Storage tanks having a capacity of 550 gallons or less may be installed above ground on the lowest floor of a building, provided that such tanks are mounted on adequate noncombustible supports, with the tank anchored thereto. No more than 550 gallons of total storage capacity may be installed without protection provided in subparagraph (ii) or (iii) below.

(ii) *Tank capacity more than 500 gallons but less than 1,100 gallons.* Storage tanks having a capacity of more than 550 gallons but less than 1,100 gallons may be installed above ground on the lowest floor of a building, provided that all portions of such tanks above the floor are completely enclosed with noncombustible construction having at least a 2-hour fire resistance rating. Weep holes 1-inch in diameter shall be provided at least every 3 feet along the bottom of the enclosure unless at least 15 inches of clearance, together with access door, is provided between the tank and the enclosure.

(iii) *Tank capacity 1,100 gallons or more.* Storage tanks having a capacity of 1,100 gallons or more may be installed above ground on the lowest floor of a building, provided that all portions of such tanks above the floor are completely enclosed with non-combustible construction having at least a 3-hour resistance rating. At least 15-inch clearance shall be provided over the tanks and on all sides between the tanks and the enclosure. A noncombustible access door, constructed so as to preserve the integrity of the fire resistive enclosure, shall be installed in the enclosure above the point where the capacity of the enclosure below the door sill would be equal to the capacity of the largest tank installed. When the longest inside dimension of the enclosure exceeds 35 feet, access doors shall be installed at intervals not exceeding 12 feet. Columns, pipes, or similar obstructions may project into the required 15 inches of space within the enclosure, provided that access door or doors are so arranged that all portions of the enclosure are accessible for servicing.

(iv) *Maximum tank size.* The capacity of individual storage tanks in no case shall exceed 20,000 gallons.

(2) *Inside of buildings, below ground.*

(i) Storage tanks having a capacity greater than 275 gallons may be buried inside of a building provided that the top of the tank is at least 2 feet below floor level. In lieu of 2 feet of earth over the tank, the tank may be covered by concrete flooring having the same thickness as the basement floor, but not less than 4 inches concrete meeting the requirements of Subchapter 10 of Chapter 1 of Title 27 of the Administrative Code and reinforced with 2-inch by 2-inch mesh of at least No. 20 U. S. Standard Gauge Steel Wire. Tanks shall be placed in firm soil and shall be surrounded by clean sand or well-tamped earth, free from ashes and other corrosive substances, and free from stones that will not pass through a 1-inch mesh. When necessary to prevent floating, tanks shall be securely anchored.

(ii) No tank shall be buried within 3 feet of any foundation wall or footing.

(3) Minimum rivet diameter in seams shall be 5/8 in., and rivets shall be spaced not more than 2 1/4 in. center-to-center.

(4) All flat surfaces of rectangular tanks shall be braced by structural members or rods.

(5) When structural members are used, the rivet pitch shall not exceed six inches.

(6) All structural members shall be designed in accordance with the requirements of subchapter ten of this chapter.

(7) Connections between bracing members and the sides of the tank shall be designed so that the connection will not fail before the member will fail.

(d) All tanks except vertical tanks above ground, two hundred seventy-five gallon or less capacity.

(1)* All oil storage tanks of two hundred seventy-five gallon capacity or less that are not buried shall have a minimum thickness of shell and head plates of no. 10 manufacturer's standard gauge steel plate. Storage tanks of sixty gallon capacity or less shall be similarly constructed but need not be thicker than No. 14 manufacturer's standard gauge.

(e) Vertical storage tanks over one thousand gallon capacity located outside of building above ground.

(1) Vertical tanks located outside of buildings above ground shall be built of steel plates of the quality required for cylindrical tanks.

(2) The minimum thickness of shell or bottom plates shall be one quarter of an inch, and the minimum thickness of roof plates one-eighth of an inch. The thickness of shell plates shall be determined in accordance with the following formula:

$$t = \frac{P \times R \times F}{T \times E}$$

where

t = thickness of shell plate in in.
P = head pressure at bottom of ring under consideration in psi
R = radius of shell, in in.
F = factor of safety (taken as 5)
T = tensile strength of plate, in psi as verified by mill test certificate
E = efficiency of vertical joint in ring under consideration. E shall in no case be taken greater than 1.00.

(3) Roof plates shall have single lap-riveted or welded watertight seams, and the roof shall be built to shed water. Bottom plates shall have single lap riveted or welded seams. Shell plate seams shall be designed to develop the full strength of the plate.

(f) Storage containers of six gallons or less.

(1) Oil storage containers used with burners or oil burning heaters and having a capacity of six gallons or less used in connection with burners or oil-burning heaters shall be designed so as to withstand a hydrostatic pressure test of at least five psi without permanent deformation, rupture, or leakage, and shall be approved.

(2) All storage containers used with burners or oil burning heaters shall be installed with rigid metal fasteners for wall, floor, or stand type installations and shall be protected against mechanical damage.

(3) Portable containers may be filled by a pump mounted on a storage tank, provided that the pump is approved.

§ 27-829(*C26-1416.3*) **Location of tanks.** (a) Inside of buildings, above ground, on the lowest floor.

(1) TANK CAPACITY OF FIVE HUNDRED FIFTY GALLONS OR LESS. Storage tanks having a capacity of five hundred fifty gallons or less may be installed above ground on the lowest floor of a building, mounted on adequate noncombustible supports, with the tank anchored thereto. No more than five hundred fifty gallons of total storage capacity may be connected to one burner or may be installed without the protection provided in paragraph two or three of this subdivision.

(2) TANK CAPACITY MORE THAN FIVE HUNDRED FIFTY GALLONS BUT LESS THAN ELEVEN HUNDRED GALLONS. Storage tanks having a capacity of more than five hundred fifty gallons but less than eleven hundred gallons may be installed above ground on the lowest floor of a building, provided that all portions of such tanks above the floor are completely enclosed with noncombustible construction having at least a two hour fire resistance rating. Weep holes one inch in diameter shall be provided at least every three feet along the bottom of the enclosure unless at least fifteen inches of clearance, together with access door, is provided between the tank and the enclosure.

(3) TANK CAPACITY ELEVEN HUNDRED GALLONS OR MORE. Storage tanks having a capacity of eleven hundred gallons or more may be installed above ground on the lowest floor of a building, provided that all portions of such tanks above the floor are completely enclosed with noncombustible construction having at least a three hour resistance rating. At least fifteen inches clearance shall be provided over the tanks and on all sides between the tanks and the enclosure. A noncombustible access door, constructed so as to preserve the integrity of the fire resistive enclosure, shall be installed in the enclosure above the point where the capacity of the enclosure below the door sill would be equal to the capacity of the largest tank installed. When the longest inside dimension of the enclosure exceeds thirty-five feet, access doors shall be installed at intervals not exceeding twelve feet. Columns, pipes, or similar obstructions may project into the required fifteen inches of space within the enclosure, provided that access door or doors are so arranged that all portions of the enclosure are accessible for servicing.

(4) MAXIMUM TANK SIZE. The capacity of individual storage tanks in no case shall exceed twenty thousand gallons.

(b) Inside of building above the lowest floor.

(1) Fuel oil storage tanks having a capacity of two hundred seventy-five gallons or less may be installed inside of buildings above the lowest story when provided with a four inch thick concrete or masonry curb, or with a metal pan of gauge equal to the gauge of the tank, completely surrounding the tank and of sufficient height to contain two times the capacity of the tank. The number of such oil storage tanks shall be limited to one per story.

(2) Storage tanks having a capacity of two hundred seventy-five gallons or less, installed above the lowest floor inside a building shall be filled by means of a transfer pump supplied from a primary storage tank located and installed as otherwise required by this subchapter. A separate transfer pump and piping circuit shall be provided for each storage tank installed above the lowest floor. No intermediate pumping stations shall be provided between the storage tank and the transfer pump. Appropriate devices shall be provided for the automatic and manual starting and stopping of the transfer pumps so as to prevent the overflow of oil from these storage tanks.

(3) A float switch shall be provided with the curb or pan around the storage tank and shall be arranged so as to sound an alarm and stop the transfer pump in case of failure of the tank or the control in the tank. The operation of the float switch shall be tested at least once each week. An alarm bell shall be located in the same room with the tank and a visual and audible alarm shall be located in a maintenance office. The enclosing and sealing of switches and wiring shall conform to the requirements of the electrical code of the city of New York for devices located in an atmosphere of flammable vapors.

*So in original. No par. (2) has been enacted.

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X

ATTENDANCE SHEET
MEETING - MAYOR'S OFFICE OF EMERGENCY MANAGEMENT
TAA 987.134
MARCH 19, 1998 1:30PM

Saroj Bhol	P.A.	Quality Assurance	435-8575
John Picone	P.A.	Assistant Property Manager	435-2341
Jeffrey Gertler	P.A.	Project Manager	435-4531
Chi Chu	Silverstein Properties		
Walter Weems	Silverstein Properties -		219-6569
Charlie Magee	Silverstein Propeties		
Joe Aliotta	Swanke Hayden Connell Architects		219-6716 FAX 219-0059
Val Lemeshev	Consentini Associates		615-3633 615-3700
Martin Schnieder	Ambassador Construction		922-1020 949-9762
Joe Dominquez	Dept. of Citywide Admin. Services		669-8087
Charles Rizzo	Charles Rizzo Associates		-695-5980
Sal Cocolicchio	Charles Rizzo Associates		
RON PISAPIA	PA ENG/QUALITY ASSURANCE		(212) 435-8562
Otto M. Clemente	- ditto -		(212) 435 8589
Danny Luey	PA Eng/Fire Protection		212-435-7552
JOANNE KOZEL	P.A QAD/ARCHITECT		212 435 8618
~~SAROJ BHOL~~			

#0 (CONCEPT)

THE PORT AUTHORITY OF NEW YORK & NEW JERSEY

M E M O R A N D U M

To: Mr. Lou Menno, General Manager, World Trade Tenant Services
From: C. John Lin, P.E.
Date: March 9, 1998
Subject: **WTC - ALTERATION APPLICATION W-987134 - MAYOR'S OFFICE - 7 WTC, 1ST FLOOR - MAYOR'S EMERGENCY MANAGEMENT OFFICE**

Reference: Review Request dated 3/3/98

Copy To: A. Fadavi, G. Gaeta, T. O'Connor, J. Napolitano, Job Folder, Chrono Folder

A conceptual review of the material submitted with the referenced request has been made.

There are **five (5) comments** on the attached rider.

Drawings:

REMARKS: This memorandum was transmitted to the Facility via OA on March 9, 1998.

for C. John Lin, P.E.
Acting Manager
Quality Assurance Division

I.D.: W98-7134-000
OMC/al
att.

Reviewers:
O.M. Clemente, Mechanical and Coordinator; J. Kozel, Architectural; A. Rohssler, Electrical; V. Tsin, Structural; D. Luey, Fire Protection.

RIDER

ALTERATION APPLICATION W-987134

ARCHITECTURAL

1. Since the fuel oil tank room has an Occupancy Classification of "A," High Hazard, a four hour fire division is required on all sides (including the horizontal surfaces). See Code Section 234, 27-340, and Table 5-2.

STRUCTURAL

2. Drawing A-1-1. Please investigate the existing structure for its adequacy to support the load of the new fuel oil storage tank.

MECHANICAL

3. Please indicate the size of the tank. Since the tank is located above the lowest floor, and above the existing storage room, only 275 gallons tanks will be permitted as per NYC Building Code Section 27-829(b). Above ground tanks larger than 275 gallons must be located on the lowest floor and comply with provisions of Code Section 27-289(a).

4. Drawing A-1-1. The space shall be ventilated as required by Code Section 27-405, high hazard occupancy.

FIRE PROTECTION

5. Drawing A-1-1. Provide extra hazard sprinkler protection for the tank room, as the space is classified "high hazard," see Comment 1 above.

THE PORT AUTHORITY OF NEW YORK AND NEW JERSERY
TENANT ALTERATION APPLICATION REVIEW REQUEST

DISTRIBUTION		
No	To	Facility
2	QAD	51 N

Facility 7 WTC TAA No. 987.134 Date 3/3/98

Application / Tenant MAYOR'S OFFICE

Consultant

Estimated Cost Submittal No. 1

Description of Work

Please review the attached (revised) application and send comments to:

Name: Jeffrey Gertler

Location: 1 WTC - 88 - South Phone: 435-4531

3/18/98 DUE DATE

DESIGN DISCIPLINES

- [X] Architectural
- [ ] Egress Analysis
- [ ] Structural
- [ ] HVAC
- [ ] Plumbing
- [ ] Sprinkler
- [ ] Electrical
- [ ] Utility > 600 V
- [ ] Civil
- [ ] Geotechnical
- [ ] Environmental
- [ ] Fueling
- [ ] Radio Freq. Coord.
- [ ] Corrosion Protection
- [ ] Elevator / Escalator
- [ ] Other

ATTACHMENTS

- [ ] Document List
- [ ] Contract Drawings
- [ ] Contract Specifications
- [ ] Tenant Response
- [ ] Computations
- [ ] Reports
- [ ] Catalog Cuts
- [ ] Other

DESCRIPTION

THE PORT AUTHORITY OF NY & NJ
QUALITY ASSURANCE DIV.
ENGINEERING DEPT.
MAR - 4 1998
RECEIVED
NOTED:
RETURNED TO:

Special Instructions

CONCEPTUAL REVIEW

THE PORT AUTHORITY OF NY & NJ
ENGINEERING DEPT. QUALITY ASSURANCE
DESIGN STANDARDS
MAR - 4
W98-7134 (0)
RECEIVED
ALTERATIONS
TENANT CONSTR.

Copy To: G. Gaeta, J. Picone

G. DALY, J. NAPOLITANO

E. MONTEVERDE, N. SELIGA

Jeffrey Gertler
Signature

OFFICE COPY

form:gertler/TAA/review